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SULPHATE OF SODA IN ACUTE ARTICULAR RHEUMATISM.

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Sulphate of soda is one of the remedies that had its day of great usefulness, but has been largely, almost entirely, superseded by the less nauseous sulphate of magnesia. Forty years ago Eberle wrote, "this salt is one of the most common and useful purgatives we possess." At this day it is rarely thought of by the profession as a physic to be commonly prescribed where a saline cathartic is needed. I think it to be, in many respects, far superior to the sulphate of magnesia, and when properly administered, scarcely more nauseous to the taste or harsh in its action.

But I will not refer here so much to its general therapeutic value as to what we have found to be its advantageous effects in acute articular rheumatism, and in general muscular aching and soreness.

I am not, as yet, sure of its mode of action, but believe its chief value lays in its power to eliminate urea and uric acid from the blood by its rapid, free, watery, cathartic action. Whether it has any chemical effect to change the excess of lactic acid in the blood, or simply eliminates it, I do not know. I simply know, as a clinical fact, that I have found sulphate of soda to suddenly change the whole character of a case of threatened rheumatism, or of well established rheumatism, in a day or two days, from one of danger and suffering to one of comparative ease

and commencing convalescence. I append the report of a few cases in practice, and leave the reader to try this agent as occasion may require, or give it the go by as he may see fit. But I should be happy to have reports from any who fail or succeed with this agent. If it has ever been commended for acute articular rheumatism I am not aware of it.

Mr. R., German, æt. 39, carpenter; works in a dry shop; has been subject to rheumatism, having had several severe attacks that confined him to bed for three to eight weeks. He is an industrious, temperate, good citizen. Came to me early in January, 1882, with a "bad cold" and general muscular soreness, but also with pain and swelling in the right knee and pain in both ankles, rheumatic in character. Said he felt all the symptoms common to his previous attacks of rheumatism, and was quite anxious to escape his prospective weeks of suffering, if possible.

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| R. Sodii sulph., | ℥ iss |
| Acid sulph. arom., | ℥℥xx |
| Sacch. alb., | q. s. |
| Aque, | ℥ viij. M. |

Sig.—Take at once, hot, on an empty stomach.

This was followed by ʒij of soda sulphate, dissolved in water, well sweetened, every three to four hours. The first full dose produced five or six very free watery discharges, from which he experienced considerable relief. He followed up with the other smaller doses of the same salt, and kept the bowels freely open, but not to the extent of producing any considerable intestinal irritation. Free diuresis was also produced by the remedy. He went to his work two days after commencing the treatment, and had no further trouble.

This was not a case of well established rheumatism, it is true; but one where every needed premonitory symptom was present.

Miss T., aged twenty-one, of strong, muscular build, generally of good health, but subject to rheumatism, had inflammation of her elbows, then of the wrists; this changed to her right shoulder, then to the right hip and knee. Had been several days afflicted. There was no symptom lacking to establish a moderate case of acute inflammatory rheumatism.

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| R. | Sodii sulph., | \mathfrak{z} ij |
| | Acid sulph. arom., | \mathfrak{m} xx |
| | Sacch. alb., | \mathfrak{z} iv |
| | Aque. q. s. to make | \mathfrak{z} viij. M. |

Sig.—Drink half at once and the remaining portion in two hours.

This was also given hot, on an empty stomach. It operated freely, producing several large, watery stools. Suffered considerable nausea soon after taking it, but no other inconvenience. This was followed by sodii sulph., \mathfrak{z} ij every three to four hours, given in plenty of sugar, with lemon juice. Her commencement to recover dated from the free catharsis and continued unto completion, which was about the third day, since which she has not felt any rheumatic pain.

Miss B., aged twenty-four, of full habit, rheumatic temperament, heavy set, strong, muscular build, generally has excellent health, being only subject to chronic granular ophthalmia and a scurfy skin disease, now and then troublesome. In November, 1881, was called to see her; found the ankles greatly swollen, red, and painful. The right knee was also somewhat swollen and tender; right hip painful. Her suffering at night was excruciating. Her pulse was 110, tongue heavily loaded, fever well marked, temperature not taken. Gave her a free cathartic of magnes. sulph., which operated well. Followed this by the attempted free use of salicylate of soda. This produced such free emesis and continued nausea that the dose was necessarily diminished too greatly to be effective. Then used potass. bicarb. \mathfrak{z} ss, every three to four hours. This was continued fairly steadily for ten days. There was some improvement in the way of diminished swelling and pain, but the disease was still holding its field obstinately. I now gave, for the first time, a full dose of sulphate soda, *i. e.*, \mathfrak{z} ij, with the acid. arom. sulph., sugar and water, as before described. This was followed by \mathfrak{z} ij of the sulph. soda, every four to six hours, as needed to keep up steady action of the bowels. In two days she was fairly convalescent and went on to

rapid recovery. Since then she has had no return of rheumatic pain.

Was called recently to see Mrs. S. She was a young married lady living in a house with damp cellars under it, and much up and down stair climbing to do. Found her with swollen ankles and tender feet, knees also painful. Sometimes felt the pains in her shoulders and elbows. Had been in this condition for six weeks, not all the time in bed; indeed, most of the time up, and sometimes trying to do a little work. Her general health was not greatly impaired. Catamenia regular; bowels fairly free; appetite moderate.

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| R. | Sodii sulph., | \mathfrak{z} iij |
| | Sacch. alb., | \mathfrak{z} viij |
| | Aque, q. s. ad | \mathfrak{z} xvj. M. |

Sig.—Two tablespoonfuls every three to four hours.

On the second day some improvement was noted, and from that date onward it was steady unto complete recovery, which was prompt and quite thorough within a week. She went to her household duties as soon as better, and never ceased to pursue them.

Mrs. D., aged twenty, of light complexion, rather nervous temperament, very active, a hard worker, and very indiscreet as to exposure to heat, cold, or rain. She had an attack of pneumonia in December, 1880, from which she recovered promptly, but in consequence of needless exposure and outdoor exercise contracted a severe cold early in January, 1882. From this there was a rapid development of articular rheumatism, which affected the knees, ankles, wrists and elbows. I found these to be swollen, red, painful, tender, and that motion caused severe suffering; pulse 120; tongue furred white, pointed. There was considerable cough, no appetite, bowels regular, catamenia two weeks since.

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| R. | Sulphate of soda, | \mathfrak{z} iss |
| | Lemon juice, | q. s. |
| | White sugar, | \mathfrak{z} iv |
| | Water, ad | \mathfrak{z} viij. M. |

Sig.—Drink half of it hot, on an empty stomach, and the latter half in one to two hours.

This operated well, and was followed by \mathfrak{z} ij of soda sulph. every four to six hours.

As the pain was very severe at night she had morphia, to control it, but needed none after the second night. Her convalescence seemed to be complete by the fourth day. No relapse.

I find this is a very difficult remedy for some persons to take, on account of the bulk of the dose and its nauseous taste. The former cannot be avoided. The latter can be overcome in a great measure by the use of other agents with it.

The addition of bitart. potass., of lemon juice, or of arom. sulph. acid, ℞xx to xxx, does away with much of the bitter, nauseous taste. Sugar, also, if added very largely, will make it much less disagreeable. But it will nauseate and vomit some persons, prepare it as you may. Full doses are far more effective and less apt to nauseate when given fasting and hot. They also operate far more promptly, *i. e.* in two to three hours, often in one hour. Small doses are easily taken and will bring on and keep up the catharsis if administered often enough, two to four hours.

I have presented no extreme cases of rheumatism, but some well-marked, moderately severe ones. The remedy either did well for them or they happened to recover quickly while using it. It is not to be expected that this is a specific. I doubt if it is as good as salicylate of soda, but it is easier taken, less depressing and a better eliminator of urea and of the urates, perhaps also of lactic acid. I give this bit of clinical experience for what it may be worth. If a remedy of merit, it will stand; if not, it deserves to fall.

PRACTICAL NOTES ON THE DIAGNOSIS AND TREATMENT OF ULCERS.

BY G. HALSTED BOYLAND, A.M., M.D., ETC.

(Concluded from p. 117.)

Analogous to other dyscrasias, it has been essayed to heal syphilis partly by general influences brought to bear upon the process of nutrition, partly by means of specific alteratives. If the first way is chosen, the patient's nourishment must be reduced to such a minimum as the actual sustenance of life will permit, and at the same time he shall drink freely thin and purging drinks; the secretions should be, as much as possible, and in various ways, stimulated by diuretic and diaphoretic means. It is hoped in this manner to hasten the change of tissue and to carry out from the body or destroy the disease germs (?). The principal representatives of this method of treatment are the bitter-salt cures of the English and Zittmann's decoction. Many, indeed, ascribe to the latter a more specific effect.

The most vaunted specific is mercury, among the preparations of which the sublimate, hydrargyrum bichloratum corrosivum, and gray salve for inunction, unguentum hydrargyri cinereum, have long been celebrated as anti-syphilitics. Yet none of the numerous preparations of quicksilver guarantee against a return of the evil. The best results are probably attained as

follows: Rest in bed, in a warm room, with good nourishment, and for a period of three weeks inunction three times daily of from 1-2 ℥ of unguentum hydrargyri cinereum. The former hunger and purgation cure recommended by Lourier-Rust during inunction helps the healing of syphilis not at all, but endangers to a considerable degree the health of weak individuals.

Salivation, that was earlier considered useful and necessary, is now, and with right, to be strictly guarded against as harmful, and as a condition that can have in its suite often terrible consequences. If the mouth be daily rinsed from eight to twelve times, with a solution of chlorate of potash, one part to fifty of water, and the patient swallows a solution of the same salt, twice as strong (four times daily a table-spoonful), salivation is generally effectually headed off, even in the most energetic inunction cure. A mercurial eczema will appear sometimes during the inunction, and especially in tender skins; this is not in the least to be regarded as a critical eruption, but only as the result of irritation to the skin caused by the mercury. In order to spare the patient this annoyance the place of inunction should be changed as often as possible. It is best to commence, for instance, with an arm, the next time taking the other; then the four quarters of the body successively, and so on, until the whole body and extremities have been rubbed. Then, after a warm bath, commence from the beginning again. The internal exhibition of sublimate was formerly fraught with difficulties, although its efficacy was recognized, and, indeed, it must be admitted that in taking this preparation by mouth there is an uncertainty, on account of its liability to reaction, as well as on account of its injurious influence on the mucous membrane of the stomach, even when the patient is well nourished. Nevertheless, I have seen the most happy results in the treatment of secondary syphilis from the employment of the following:—

R. Hydrarg. bichlor., gr. j
Guaiac. resin., grs. c
Gummi. muc., q. s. m. f. pil. xxiv.

Sig.—Take two pills three times a day, immediately after meals.

This treatment must be continued for some weeks. Or

R. Hydrarg. bichlor.,
Ext. opii, āā grs. v.
Glycerine, q. s. f. l. a. pil. c.

Sig.—Two pills, three times daily; and continue for a long time.

One case in particular, of very old syphilis, from

among very many others, shows the good effects of minute doses of quicksilver, extending over a long period. This patient was subject to the usual syphilitic headaches, and had on his nose, and arm, and back, several ulcers that had been very obstinate in treatment. They were about the size of a dime. After the pills had been administered for a fortnight they began to take on a more healthy appearance, and finally healed, at the end of four weeks. No potass. iod. was given, either during or after the administration of mercury, and no other treatment of any kind ordered. The patient, however, of his own accord, has daily, morning and evening, rubbed the ulcers with imported white castile soap. The alkali probably did no harm, to say the least; and perhaps, theoretically, some good, but this single circumstance would not warrant any opinion, pro or con, except in so far as the cleanliness of ulcers in general is concerned.

Dr. G. Lewin's* method has received great approbation and wide practice. Fearing, perhaps too much, the inunction cure, and the internal exhibition of sublimate, he introduced, and has now carried out in several thousand cases, the hypodermic injection of sublimate. Lewin uses for this purpose the following solution:—

R. Hydrarg. bichlor., gr. ij-v.
Aque destill., 3j.

with a modified Pravaz-Luër's syringe, containing 36 grains of liquid.

As the stick of the lancet-like point, as well as the injection itself, is painful, those places on the body are chosen for injection where the cutis is less sensitive, namely, on the back. The quantity of sublimate injected, once daily, varies, according to the requirements of a given case, between one-tenth and one-third of a grain. To insure entire disappearance of existing syphilitic symptoms, the whole quantity necessary was found to be from one and one half to three grains. The results of this treatment were of the most favorable character, both as regards the direct influence on the disease and the guarantee against recidivation. As an especial advantage of this treatment, is to be noted, that the patient is not obliged, during it, to remain either in his bed or even his room, if the weather is at all good, and can, therefore, go about his business and live as he otherwise would.

With the principle fixed, the quantities given, and an ordinary hypodermic syringe, the general practitioner has in his hands, probably, the very best treatment of syphilis. The employment of

* *Charité-Annalen*, Bd. 14. Die Behandlung der syphilis mit subcutaner sublimate-injection. Berlin.

iodide of potash with mercury would, in our opinion, be better omitted. Being a powerful reabsorbent, it would affect the slow alterative action of mercury; but in inveterate syphilis and after repeated, irregular and very free use of mercury, iodide of potash is of great service. It is, however, useless to begin the treatment of lues universalis with it. If employed too long and in too great doses, it has just as bad, though, perhaps, less apparent, consequences as the analogous treatment with quicksilver. But the certainty of the result is much greater if we begin with a very cautious mercurial course, in a warm room and with good diet, and later attack any recidivation with iodide of potash, or when this fails us, with Zittmann's decoction, raised in strength according to the condition of the patient. With reference to diet, only so much stress was laid upon it a short time ago, as regarded the avoidance of all exciting, and the diminution of plastic (nitrogenous) food, it being deemed necessary as an adjuvant to the mercurial treatment. Such a scanty diet, however, is only suitable to over-nourished or, at most, very well nourished individuals, but can only retard instead of helping the cure in the general run of patients; it is especially to be avoided in such as are weak by nature or from former illness, privations, or, perhaps, medical treatment. Here, also, the physician must discriminate. Especial attention should be paid to the place where the patient stays during treatment. Although a warm room is deemed useful, even necessary, to the patient, it is certainly not intended to say that such a room needs the air less than others, or that, in general practice, a patient should be kept in a small, close room, without sun. Fresh, pure air, and a sufficiently frequent change of air, are as necessary to syphilitic patients, no matter what treatment be adopted, as to others. Finally, the ordinary psychical tendency to melancholia during the treatment of syphilis, more than in most chronic evils, should receive strict attention and be treated by moral counteraction—pleasant books, cheerful words, innocent amusements, etc.

The therapy of scurvy consists, above all, in removing the aetiological features. Good food, especially fresh meat and fresh vegetables, acid drinks, lemon syrup, lime juice, citric acid, enlivening and tonic medicines, tinctures of iron, soon bring about an improvement, and in cases that have not advanced too far, a cure. Unfortunately, just where scurvy is present in great mass, on ships and in war hospitals, it is least in the power of the physician to procure the

most important of these remedies. Although the prevalence of scurvy in armies, in time of war, is generally conceded to be a common occurrence, yet I never saw a case of it during a short service in the army during the great war in America, nor one during a service in the French army, extending throughout the whole duration of the Franco-German conflict; moreover, during a sea voyage of several months' duration, there was not a single case of scurvy on board the vessel, although our only food was in hermetically sealed cans and salt beef. On the other hand, I did have a case of the nature of scurvy on land, and in private practice, brought on by eating too much ham and salt beef. The patient had such a craving for salt that he even employed it on ham and salt beef. The symptoms disappeared slowly after the employment of alkalies, such as soda bicarb., etc., ten grains three times daily, with a dose of calomel at night; saline aperients were also given in the course of treatment. But, in our treatment of ulcers, we must give a very prominent place to topical therapy, as well with dyscrasic as idiopathic ulcers. The question was at first freely discussed, whether, indeed, all ulcers, especially those that have already lasted some time, ought to be healed. Do we not, by suppressing them, take away from the organism a healthful drainage, as it were? As far as healing the dyscrasic ulcer is concerned, no one will be in doubt as to its advisability; but in those that owe their existence to topical causes, and are sustained by the tension of a scar, by atony, etc., it is first necessary to remove the local causes; and this is, perhaps, not advisable, because "a general affection exists, for which the ulcer serves as a kind of drain, and which, after suppression, would make itself felt in a vicarious and dangerous manner." On this point let us hold fast, before all, that we shall not succeed in healing an ulcer of this kind until the general affection is removed. When we allow to nature so great an intelligence as to form a useful, so-called drain, why should she be so simple as to let it readily be closed up. There is, to day, no doubt that the chance cases in which the rapid healing of an old ulcer is recorded are to be explained in quite a different way. Compare "fistula." The main fact is that, in general, old ulcers do not heal rapidly, and that recidivation, even after perfect healing of an old ulcer, takes place uncommonly often. The loss of substance at the place of the ulcer is always filled up by cicatricial tissue. This develops itself on the one hand slowly, and can, on the other hand, through

many more insignificant influences, be brought to necrosis easier than normal tissue.

It is also certainly possible for a dyscrasic ulcer to heal without the aid of science, as has already been mentioned in speaking of syphilitic ulcers, of course, without guaranty that with healing of the ulcer the dyscrasia is removed. Then, again, it has been shown, by precise observations, that an ulcer, on account of strictly local difficulty, could not heal when there was no dyscrasia in the body of the patient, or long after it had ceased to exist. The removal of this local difficulty, in all cases of ulcer, has become, in modern times, the principal exercise of the general practitioner, as well as the surgeon. If it is a question of simple ulcer, the treatment employed in suppurating surfaces is all that is required—cleanliness by means of sponging with tepid water, and the application of compresses wet with lead water. Above all, the part upon which the ulcer sits must have rest and be protected from external injuries. Care must, therefore, be taken not to change the bandage too often. The *hypersthenic ulcer* demands, in general, an antiphlogistic treatment. Moistened, warm cataplasms, and oft repeated lukewarm baths render, in most cases, the best services. Patients more seldom bear the application of cold. *Asthenic ulcers* require the exhibition of irritating and astringent measures, notably aromatic fomentations and baths. In *putrid ulcers*, after chemical disturbance of the gangrenous parts by caustics, the disinfectants find a place, then charcoal bandages, or when the locality permits, permanent baths and irrigation. If the inflammatory reaction necessary to healing is wanting with this, we must try and induce it by irritating means (excitantia). The *callous ulcers* demand, for the purpose of removing the chronic inflammation upon which the callosity rests, a position of the part such as will tend to aid the flowing off of the liquids, also the application of cold, and later a compressive bandage, under the influence of which the exudation that has already become fast, will be most easily resorbed. In the application of such a bandage I have found strips of adhesive plaster of the greatest service; also in *fungous ulcers*, in which it is especially necessary to regard the ætiological conditions. In *œdematous and varicose ulcers* our therapeutics is chiefly to be directed against the œdema and varicosity of the veins. Here, the tinct. ferri perchlor., and tinct. digitalis, ten drops of each, alternately, three times a day, with compression, are our best means. The two last forms, especially on the lower leg, where ulcers occur

uncommonly often, are among the most common complications; for this reason we may not unfrequently throw the treatment of these ulcers with that of varices together. The elastic stocking is our mainstay with them. Finally, it is of great importance to remove any malformations that may show themselves on an ulcer, namely, sinuosities whose removal is best accomplished by amputating the undermined borders, so far as they are of considerable thickness; at least they must be slit up. This method is preferable to all others.

The plan of encircling an old torpid ulcer is also excellent. It consists of describing a circle with a razor or other sharp instrument, just outside the demarcation line of the inflammatory zone surrounding the ulcer. The rationale of this proceeding has already been explained in this article. A razor is probably the best instrument, especially one with a heavy back, as by its own weight it will make the incision just deep enough, if guided by the hand of the practitioner.

The signal of beginning to heal is the change of the secretion into good pus of proportionate quantity. Thus the ulcer is gradually changed into a suppurating surface that then cicatrizes in the usual manner. There is a pathological reciprocity here, for just as an ulcer becomes again a suppurating surface, so a suppurating surface, notably a wound, can change into an ulcer, especially when a considerable loss of substance has taken place. As soon as cicatricial tissue can form, a suppurating surface is made out of the ulcer; as long as there is no cicatricial tissue formed, ulceration continues. As regards technical distinction, recent authorities accept the following four stages in the healing of ulcers: 1. Stadium detersionis. 2. Stadium suppurationes. 3. Stadium granulationis. 4. Stadium cicatrisationis. The definition of these by no means sharply separated stages is indicated by the natural process of healing. This embraces ulcers in general, lupus included, in the treatment of which the dyscrasia as well as the local therapy must be kept in mind. By combining both, and attacking the constitutional and local diseases together at the outset, the quickest and best results are obtained. Cod-liver oil, preparations of iodine (hydrarg. bijod. rubrum) and the anti-scorpulosa in scrofulous lupus, the anti-syphilitica in syphilitic lupus. If the clinical history of lupus can be accurately traced, a taint of such kind will usually be found as its author. The same principles apply here; constitutional treatment alone, while improving the general condition of the patient, will not re-

move the ulcers, which local treatment alone might do, but which it will be more likely to accomplish when aided by constitutional treatment. Among the salves most useful are: one scruple sulph. jodat. to one ounce of lard, and one to two scruples of iodine to one ounce of mercurial ointment. If these do not produce other results than a superficial irritation, we must at once employ caustics, the choice of which is immaterial. The quickest, surest, and least dangerous, is the following; zinc chlor. one part, to two parts of meal. Chloris. of gold is certainly, at least, as efficacious, but too expensive. Burying small pieces of caustic potash in the lupous tissue also causes a thorough breaking down of it. The employment of argent. nit. requires more time and is more painful. The galvano-caustic leaves other therapeutic measures far behind; it is so easy to burn the little ulcers with the blunt point of the instrument. The actual cautery is seldom good to employ, because there are unavoidable heat rays which spread to the surrounding parts, and it is on the face that we find a very large proportion of lupous ulcers. If the locality permits, the knife merits the first place, especially where, by a little plastic management, it is possible to replace the part carried off. But as long as the neighboring parts show any traces of lupus it is better not to undertake any plastic operations, on account of the danger of recidivation.

Hebra considers exfoliative lupus as an idiopathic local disease, and uses only local treatment. He readily agrees with us, however, as to lupus serpiginosus, lupus hypertrophicus and exulcerans.

We see no reason to abandon our ground that all lupus will be found, provided the clinical history can be got at, to rest upon a dyscrasia.

I have found, in my own practice, tar ointment, as prepared officinally, an excellent dressing for syphilitic ulcers, in conjunction with a mild mixture of mercury and sarsaparilla internally. The tar salve acts as an irritant, and inflames the ulcer at the first, but this soon yields to an agreeable reaction. I order it to be applied, morning and evening, on a piece of soft linen, kept in place by a bandage. In one case of syphilitic ulcer of the ankle, which had been much inflamed by over exercise on the part of the patient, a middle-aged married man, and father of several healthy children, still living, one application of tar salve seemed to increase the inflammation, but in a few hours this disappeared, and after a second application, the inflammation was reduced to a very great extent, the size of the ulcer

d diminished, and its general appearance became more healthy. This patient did not consult me but twice. Several months later I met him. He was going about with free use of his ankle, not complaining of further local inconvenience, and much improved in general health. Several years had elapsed, the patient told me, between his first syphilitic infection and the appearance of the ulcer. About its development and direct exciting cause, he could not give me exact data.

STRICTURE AT THE SIGMOID FLEXURE OF THE COLON.

BY C. H. MERRICK, M.D.,
Of Seattle, W. T.

Mrs. R. is a delicate lady, twenty-seven years of age. For some time she has been troubled with constipation and hemorrhoids. Previous to my visit to her she had been treated by two gentlemen of the homœopathic school, for constipation. What medicines and potencies they used I do not know, except that the gentleman employed previous to my taking the case admitted that, having no hope of her recovery, he had given her large doses of morphine, "to keep her quiet." At my visit I was informed that it was then twenty-one days since she had a movement from the bowels. The abdomen was not so very tender to the touch, but very tympanitic; the flatus in the small intestines distending the abdominal walls so that the patient looked like one at full time for confinement.

The impression on the mind of my predecessor was that there was intussusception of the intestines. I thought not, as I discovered the descending colon, for six or eight inches above the sigmoid flexure, to be filled with hardened feces, and learning that she had been treated to large doses of morphine for more than a week, I expressed the opinion that it was a case of impaction of the natural excrement of the bowels.

As I write for the benefit of the medical profession, I will give a brief sketch of my treatment of the case. Of course, I prohibited morphine. I gave *sodæ et pot. tart.*, *rhamnus purshiana*, *sodæ sulph.*, and *hyoscyamus*, as laxatives, keeping her quiet with chloral hydrate and bromide of potassium. To subdue fever and inflammation I depended upon aconite, gelsemium and digitalis. Let me remark here that these remedies were used singly; I avoid compounds as much as possible in all my practice. Of course, the usual external applications were made, and enemas occasionally repeated, although she had been, previous to my first visit, nearly worn out

by attempts to distend the bowels with water. A half dozen times or more I attempted to introduce a rectal tube, but owing to the great pain which it caused I failed to insert more than a few inches of the instrument. The temperature of the patient never exceeded 101°, generally ranging from a fourth to one degree below or above normal heat. Her pulse ranged from 110 to 140, and at times with other symptoms, indicating a speedy dissolution of soul and body. A surgical point of some interest must be mentioned here. Deeming any rational procedure justifiable to relieve her intense agony, I did not hesitate to plunge an aspirating needle into various distended intestines as they bulged up beneath the thin walls of her abdomen. Eight times, and in as many localities, I repeated the operation, in each case causing the intestine to collapse and giving the patient temporary relief. No peritonitis or other unpleasant result followed these punctures.

I wish also to correct another popular impression which I have known some physicians to assent to. The picking at the bedclothes, grasping at invisible objects, *muscæ volantes*, is generally thought to be an infallible sign of a fatal termination. So, also, is stercoraceous vomiting, subsultus tendinum and singultus. All these ominous symptoms were present for several days, yet the patient is now convalescing most favorably.

On the twenty-seventh day I discovered that the plug of hardened feces in the transverse and descending colon had softened, so that by massage and taxis I dislodged the mass, moving it upward. I then became convinced of what I had suspected, that there was a stricture at the sigmoid flexure of the colon. I sent for Dr. G. A. Weed, who kindly came to my assistance. He advised a renewal of the attempt to insert the tube, under anæsthesia. He administered the "A. C. E." mixture, and I insinuated my fingers and finally my hand into the rectum, and found it a complete *cul de sac*. I soon discovered a small depression not larger than the os tincæ of a virgin womb. Into this I wedged my index finger and then the middle finger, and spreading my fingers to the utmost of my strength, managed to dilate the passage. I then inserted the flexible tube and withdrew my hand. With a stomach pump I now threw in warm water and then allowed it to escape through the tube. By repeating this operation a gallon or more of fluid feces was withdrawn. The patient soon fell into a quiet sleep, and her progress to recovery, to this date, has been rapid and satis-

factory. The sphincter ani, so put upon the stretch, is recovering its power. The dilated stricture continues open, and strong hopes are felt that another operation to insure its patency will not be required.

I have no desire to say a word disrespectful of my homœopathic friend who preceded me in the case. I believe, in certain kinds of work, a gimlet and tack hammer are useful tools. I prefer to have a whole chestful to select from, and in this case my friend had certainly, in the use of morphine, borrowed our sledge hammer and was using it in rather a wild and desperate manner.

A DENTAL HERESY.

BY HENRY S. CHASE, M.D.,

Of St. Louis, Mo.

Like the professions of medicine and divinity, that of dentistry has at last its heresy. It is called the "New Departure" by the dental journals, though who first gave the movement that title is not known. The New Departure is not only a new method of practice, but the theory upon which the practice is based is also new.

As this practice involves methods of saving the natural teeth entirely diverse from the old methods, it may not be uninteresting to glance at its history.

About eight years ago Dr. Fletcher, of England, announced in the dental journals that nine out of every ten gold fillings leaked. That is, the gold plug did not exclude saliva from the cavity of decay in which it was placed to do such duty. An "experimental dental club" in this country demonstrated the truth of the assertion, much to the disgust of its members.

About this time Dr. Palmer, of Syracuse, N. Y., asserted, in the *Dental Cosmos*, of Philadelphia, that the failure of operations with gold lay mainly in its incompatibility with dentos (tooth bone), forming with the latter a galvanic battery of low power, but of constant operation, of which gold was the negative element of the battery, and dentos the positive. As is well known, it is the positive element that suffers chemical disintegration in the battery.

The entrance of saliva under and around a gold plug in a tooth gives the condition of a constant battery, and consequently, a constant decay of the tooth at that point.

Dr. Chase, of St. Louis, and Prof. Flagg, of Philadelphia, early took hold of the subject, and not only made extended investigations themselves but also interested several gentlemen, who are

teaching physical science in well known colleges and universities. The latter confirmed the theories of the "New Departure Corps" by experiments in the line of metallurgy and magnetism. The writer has not the liberty to publicly give the names of these gentlemen, but the editor of this journal has them.

When the results of these investigations were given to the dental profession through its magazines there ensued great excitement, and for six years there has been war between the "New Departure men" and the "gold men." But the present condition of the heresy is well put by an eminent dentist, and president of an important dental society, in the following words, written in a private letter, recently, to Professor Flagg:—

* * * * "I feel, as I know do hundreds of others, that I owe much to you and your confreres, Drs. Palmer and Chase, for the work you have done in making more plain and practicable the great business of *saving teeth*, and although it is still the fashion to deride the 'New Departure' doctrines in the dental meetings, I know of none who have not been influenced by them; and I believe there are not many who do not apply them at this day, in practice."

The outcome of the whole heretical movement is this: gold as a filling material takes an inferior position.

During the eight years that this subject has been under discussion, the thought of the profession has been turned toward the discovery of materials that would be in more electrical harmony with tooth-bone than gold is, and also make water tight or saliva tight fillings; and there has been great success in this line. Alloys of metals have been made, which, being amalgamated, make not only water-tight plugs; but even those which will exclude alcohol as a test of completeness, and which have a tint more in harmony with the color of the enamel than gold has.

Besides metallic alloys there are chemical combinations made at the instant of introduction into the cavity of decay, which are in comparative electrical harmony with dentos, and are, indeed, the positive element in the dental battery.

There are other heresies that need not be described here, belonging to the New Departure, which tend to the preservation of the dental tissues, and which materially simplify operations.

The whole movement is one of immense importance to the public, and I think this is the first time it has been made known to them in print, excepting through dental journals.

HOSPITAL REPORTS.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM GOODELL, M.D.,

Professor of Clinical Gynecology in the University of Pennsylvania.

Reported by WM. H. MORRISON, M.D.

Cystitis—Dilatation of the Urethra.

GENTLEMEN: The first case that I shall bring before you to-day is one of cystocele. Let me first read her history. She is twenty-one years of age and has had two children, the youngest of which is eighteen months old. Both her labors were very difficult. They were instrumental labors. Since her first labor she has been troubled with irritability of the bladder. After the second labor matters became worse, so that she is now in a very wretched condition. She suffers from frequent micturition, burning in the act of passing her water, and constant vesical tenesmus. The urine contains pus, and frequently blood. She has purulent leucorrhœa and laceration of the cervix. There is a good deal of pain caused by touching the bladder. She is at present nursing her child. The urine has been examined, and contains a good deal of albumen, which I fancy is owing principally to the presence of blood and pus. There appears to be no renal trouble whatever.

Here, then, is the history. She has passed through various courses of treatment. She has consulted a great many physicians, and taken any number of medicines, medicines chemically adapted to the condition of the urine and diuretics, without any relief whatever. She says that she has to pass her water every half hour. This I think is an exaggeration, but if she is obliged to get up every hour during the night, you can understand what a tax it must be on her strength. In addition to this strain on her system from the irritability of her bladder, she is nursing her child. I have seen the most woe begone patients whose only trouble was this condition of their bladders.

It is barely possible, although I have no evidence in regard to the matter, that the traction made with forceps was not made in the axis of the superior strait or in the axis of the curve of the pelvic canal. If the physician had drawn the head forward too much, it would have pressed the bladder against the pubic bone, setting on foot a cystitis. I have often seen inflammation of the bladder caused by the way in which the head is drawn out. As I say, I have no right to make such a supposition in this case; I simply refer to it in order to educate you in this matter. After you have applied the forceps, you should draw the head down in the axis of the pelvic canal; but although you may deliver the head scientifically, you will often find that the woman is unable to pass her water. This may be due to one of three causes. In the first place, the mucous membrane of the urethra may have become swollen, from the pressure of the head upon it; in the second place, she may have lost power over the extrusor muscles of the bladder, they being temporarily paralyzed; and in the third

place, the long labor has so weakened her that she is unable to cause the urine to flow by contracting the abdominal muscles, which are really the chief extrusor muscles of the bladder. For these reasons we may, after a difficult labor, find the woman unable to pass her water. It should always, under such circumstances, be drawn; but you are young, you have never passed the catheter, and you do not care about doing it. The woman may tell you that she is unable to make water. You say to her "It will come around all right after a while. I have known physicians leave the bladder go thirty-six hours without emptying it, and often an incurable cystitis follows this lack of common sense. In such cases, always pass the catheter, on your finger if you can, but if you cannot, call for a light. Never allow any time to elapse after the woman has begun to desire to pass her water. After a tedious labor, and often after an ordinary one, there is such flaccidity of the tissues that the bladder will become enormously distended without the woman complaining.

Suppose that cystitis has occurred; what will you do? The water should be drawn, either by yourself or the nurse, or if you live four or five miles from your patient you may use a self-retaining catheter. This Skane-Goodman is the best. Then you should put a suppository into the rectum. A very nice one contains—

R. Extract opii, gr. j.
Extract belladonnæ, gr. ʒ.

One-third of a grain of the belladonna may seem very small, but many women are so impressionable to its action that you have to begin with a small dose. In these cases I often give belladonna by the mouth, in the form of the sulphate of atropia. A poultice may be put over the lower part of the abdomen, and in the course of a few days you will find, in the majority of cases, that the cystitis has disappeared. But, if you do not treat the case properly the trouble may run on until it becomes as bad as it is in this woman.

I shall, in the first place, examine the womb. I find that there is a tear on the right side of the cervix. This leads me to infer that the head presented in the occipito-posterior position. This may have been one reason why the forceps were applied. There is also a small tear on the left side. I do not find any evidence of cellulitis or of the presence of a tumor. The vagina has lost a great deal of its elasticity. This may have resulted from overstretching during labor.

I wish to determine next whether or not the uterus is doing any mischief. I therefore pass the sound. It shows that the womb occupies a very good position. It is a little lower than it should be. It measures three inches, but after two labors, especially if there was laceration of the cervix, we should expect some subinvolution.

I intend to dilate the urethra, but before doing so, I am going to wash my hands, for I have been using my finger to examine the vagina, and I do not want to get these discharges into the bladder. This mode of treatment (dilatation of the urethra) is a very successful one. It is not infallible, but in the great majority of cases it does cure, and even where you do not absolutely cure

the patient, you usually make her so comfortable that she is very grateful.

How will you proceed to dilate the urethra? I take a dilator (Ellinger's, with a slight modification of my own) and gently distend the urethra until it is large enough to admit the tip of my little finger. Then with my little finger I carefully dilate the canal, trying to do no harm. I have frequently torn the margin of the meatus and this rarely heals up, but this does no harm, although I have seen considerable bleeding come from it. I operated once in this hospital, and in going to the ward some time afterward, found that the woman had lost considerable blood. The hemorrhage was easily checked by Monsel's solution. In another case which had a very bad cystitis, I operated before the class and greatly relieved her. She afterwards became pregnant, and the pregnancy started up the old symptoms. I again operated, and tore the anterior part of the meatus. The bleeding was so considerable that I could not check it with the ordinary styptics. I put my finger on it, but as soon as I removed my finger the bleeding returned. I then put in a stitch, down to the pubic bone, including the bleeding point, and this checked the hemorrhage. The bleeding in this case was due to the fact that in pregnancy the veins of this portion of the body are in a more or less varicose condition.

Before using the dilator I shall pass in the sound, to see if she has a stone. If I introduced the sound without ether she would suffer excruciating pain. I feel that the bladder is much contracted and roughened by its contraction and by the prolonged cystitis. There is an erosion of the mucous membrane, as is shown by the presence of blood in the urine. I do not feel any stone.

I shall now pass in the dilator. Although she is snoring under ether she flinches when I dilate. A little urine tinged with blood flows out. As I have said, this is a very successful operation, but I have failed. In one of the worst cases that I ever saw the operation failed. In this lady the cystitis was caused by traveling all day in a stage coach where she did not have an opportunity, with decency, as she thought, to empty her bladder. By and by, when she arrived at her stopping place and had gone to her hotel, she found that she could not pass her water. A physician was sent for, but he was absent, and this caused a longer delay. When he came he had a good deal of difficulty in introducing the catheter, because the distended bladder had caused retroversion of the uterus. From that time (she was then a young lady) until the age of forty-five, when I first saw her, she was a martyr. In her case I dilated the urethra without a particle of benefit.

There is some bleeding here, from a slight lateral tear, which I never saw before in performing this operation. In my book I say that you can dilate the urethra to the size of the forefinger. I want to retract that, for I have had one case in which, after dilating with my forefinger, some loss of control over the bladder followed. My index finger is of medium size; some may have a smaller one and others a larger one. I think, therefore, that if your index finger is of large size, you had better limit your-

self to the little finger, using the forefinger only when the dilatation with the little finger fails. I have had to operate in a case where the physician had introduced his thumb. The result of the dilatation being that she had entire loss of control. In the course of a week or two I expect such a case to come into the hospital. Even in the case to which I have referred, where there was this stillicidium, this loss of control, the woman was so much benefited that she did not complain of it.

Now this operation was not original with me. I do not want you to get that idea. I think that it was Mr. Teal, a surgeon in Birmingham, England, who first brought forward some cases of this operation and he was soon followed by others.

What is the rationale of this operation? I cannot tell you positively.

One way that I account for it is this: That the irritability of the bladder produces spasmodic contraction of the muscles of the urethra, causing them to increase in size. We have no true sphincter muscle in woman, but we have a series of little fibres all the way from the meatus externus (the meatus externus has no muscular fibres) up to the neck of the bladder. These little fibres, in consequence of the irritation of the bladder, may have increased in size and strength. You know that if you have an irritable eye, the muscles are continually twitching, and soon become enlarged.

There is another condition in which dilatation would do good. There may be, in these cases, a little fissure at the neck of the bladder. Fissure in ano is very common in women. By the way, do not forget to examine carefully the rectum of a woman who complains of pain when the bowels are moved. Where you find one man with a fissure, you will find nine women. There are two reasons for this: first, the constipation which is common in women; and second, the injuries sustained during labor. I am disposed to think, while I cannot state it confidently, as I have never felt it, that we may have a little fissure at the neck of the bladder. In these cases you will find a painful spot just at the neck of the bladder. Higher up you do not get the same kind of a pain. If this condition is due to a fissure at the neck of the bladder, we should expect overstretching of the urethra to cure it, just as overstretching the sphincter ani muscle cures a fissure in ano.

While I have been talking I have also been working. This urethra has dilated very easily, and I do not find the bladder as rough as I had expected. As I have gotten my little finger in so easily, I shall try to pass my forefinger. There is a little tear on the left side, but that will heal up readily, as it is within the urethra. I shall use my left forefinger, for, as I am a right-handed man, my left hand is the smallest. My forefinger goes in quite easily.

I expect that by to-morrow this woman will experience an immense relief. You would suppose that she would suffer great pain the first time she passes water, but she will suffer far less than she did before the operation.

Dr. Baer tells me that she has had injections into the bladder through a double canula, but I

think there is nothing so unsatisfactory in responding to treatment as a chronic cystitis in woman or in man. I am not cognizant of any case cured by injections through a double canula.

I now have my finger in the bladder, and if there was a stone I should feel it, unless it was incarcerated and so small that I could not find the point where it was lying. I never had a urethra in which I introduced my finger with more ease than this one. I have not ruptured a fibre inside. I feel it pinching my finger as I withdraw it.

Immediately after the operation I introduce an opium suppository, so that she will be under the influence of the opium by the time she recovers from the ether, for women are always in a demoralized condition when they come out of the ether. I introduce an opium suppository after all operations on this part of the body, even after the painless operation for laceration of the cervix, for there is some soreness here, from the pressure on the perineum with the speculum.

Let me give you a few remedies useful in cystitis in its acute form, at which time it should be stopped. In the first place, the use of the suppository of opium and belladonna referred to; or, as women are easily affected by belladonna, I sometimes put the belladonna in one suppository and the opium in another. I can then push either as may be necessary. In the second place, never allow the bladder to become too full. In the third place, be very careful, when passing the catheter, not to allow the catheter to be introduced to its whole extent, but only far enough to get the eye beyond the neck of the bladder. Just as soon as the urine begins to flow, stop passing the catheter. Why? Because an irritable bladder resents anything like a foreign body. If you pass the catheter some distance into the bladder, pretty soon the urine flows out, the wall of the bladder will touch the catheter, and just as soon as it touches the foreign body it will flop

right down the end of the catheter, bruising itself. It is a good plan to employ a catheter which has a hole directly at the end.

Medication by the Mouth.—Take it all in all, I think atropia is the best remedy. I prefer it to belladonna. I usually give it according to this formula:—

R. Atropiæ sulphatis, gr. j
Alcohol, ss
Aquæ, f℥ ss. Solve.

Of this I give from four to six drops. Patients rarely take more than six drops without producing dryness of the throat and dazzling about the eyes. If you choose to add soda, sweet spirits of nitre or some diuretic, very well.

When it comes to injections into the bladder, I must confess that my own experience has not been very satisfactory. The proper plan is to inject with a double canula. Injections of the sulphate of morphia may be used in the strength of three or four grains to the f℥. This is not curative. It simply obtunds the pain. Quinine (five grains dissolved in an ounce of water by the aid of dilute sulphuric acid) has a good reputation. Carbolic acid (two, three, four or five drops to the f℥) has also been used.

For chronic cystitis, I know of nothing so good as strong solution of nitrate of silver, beginning with two grains to the ounce and increasing the strength every day by one or two grains until you reach twenty grains to the ounce. Such a solution cannot be left in the bladder very long. Do this: Inject the solution and then begin and count one—two—three—four—five—six—seven—eight—nine—ten; ten seconds; then withdraw the fluid. When you employ this injection you usually have to give a hypodermic of morphia, as the pain is very severe. I should, however, not adopt this treatment until after dilatation had been tried.

EDITORIAL DEPARTMENT.

PERISCOPE.

Ether vs. Chloroform.

Dr. T. Priddin Teale, Surgeon to the General Infirmary at Leeds, thus writes, in the *British Medical Journal*: It is confessedly difficult, perhaps even impossible, to settle, by statistics, the question of the relative danger of these two anesthetics; chiefly for the reason that, while we know pretty nearly how many deaths from each agent occur during the year, we have not the means of ascertaining the relative proportions of the cases in which each anæsthetic has been used.

Such being the case, it may be worth while to record the opinions of those who, having for a great number of years had experience of chloroform, have also for many years (in my own case, more than six years), almost abandoned it in

favor of ether. I wish, therefore, to tender my conclusions for what they are worth, based, as they are, upon what I have seen in the practice of my colleagues and myself at the Leeds Infirmary, and upon my experience of anesthetics in my private practice. My conclusions are as follows:—

1. Ether, *properly administered*, is a much safer anæsthetic than chloroform. So much safer do I believe it to be, that I counsel every surgeon whom I can influence in the matter to study the method of its right administration, and to let ether take the place of chloroform. The exceptions I make in favor of chloroform are: in infants, in patients subject to asthma or chronic bronchitis, and also, perhaps, in cases of abdominal obstruction, with difficult breathing, in which an operation has to be performed.

2. When many operations have to be done in rapid succession, to use ether is a great economy

of time. A good "etherist" can get most patients under its influence in from one and a half to two minutes, whereas, in my experience, chloroform must be given from six to fifteen minutes before an operation can be commenced. I am aware that chloroformists trained in Edinburgh usually administer chloroform more rapidly than those trained in English hospitals.

3. A patient under the influence of ether is far more passive, and, therefore, in a more convenient condition for operation, than one under chloroform. As soon as the effect of chloroform is passing off, the patient becomes, as a rule, and often very suddenly, very sensitive to pain; whereas, in the case of ether, especially if the patient have been kept for some time under its influence, the return of sensibility to pain is very slow. In fact, a patient may become so far conscious as to converse with the surgeon while stitches are being placed in the wound, and at the same time be entirely unconscious of pain. This was not my experience of chloroform.

4. When ether is administered without food on the stomach, troublesome sickness is very rare.

5. In using ether, the safety and comfort of the patient, the rapidity of the anesthesia, and the convenience of the surgeon in operating, depend very directly upon the method of administration employed, and the manner in which the administrator does his work.

6. There are good methods of administration of ether and bad methods, and there are good and bad "etherists." The varying opinions of the value of ether which prevail in the profession probably depend very directly upon the varying methods and manners of administration.

7. It is a bad method to give "ether on a towel," as first taught us by Dr. Joy Jeffreys, to whom England is deeply indebted for his successful crusade in favor of ether. This involves a great waste of ether, ten to twenty ounces being required. The patient's lungs are chilled, and bronchial *râles*, struggling, and maniacal excitement not unfrequently result. I, along with my colleagues, commenced ether under this system as a duty, and by no means an agreeable one, and held on doubtfully when I suspected that some patients probably died from the effects of the chilling of the lungs.

8. It is a bad method to give ether with the American basket-work frame, which, though not much better than the towel, served a good purpose as a step to better things.

9. The good methods are those in which the patient breathes over ether into an India-rubber bag, a method, I believe, introduced into practice by Dr. Ormsby, of Dublin, and carried to further perfection by Mr. Clover. In this method, the patient breathes the same air over and over again for six or eight times, thereby economizing the heat of the air-passages, economizing ether, and enhancing the effect of the ether by partial asphyxia. My experience of the use of Clover's smaller inhaler, under good management, is this: (a) A patient can generally be ready for operation in a minute and a half, sometimes in less than a minute; (b) There is rarely any struggling; (c) Noisy excitement

hardly ever occurs—perhaps, in my private practice, once in a hundred times; (d) *Râles* in the trachea are but seldom heard; (e) Instead of six or eight ounces of ether being used in a short operation, and sixteen to twenty in one lasting an hour or an hour and a half, half an ounce or less suffices for a short operation (such as "sphincter-stretching" or "iridectomy"), and two to three ounces for an operation of an hour's duration, such as colotomy or excision of a joint.

10. The administration of ether by inferior methods is still too common, and was until recently prevalent in some of our larger hospitals.

11. Even with Ormsby's or Clover's inhalers, there is an infinite variety of skill in different etherists.

12. In order to become a good etherist, the administrator must *study how* to give ether, must watch the patient *attentively* while giving it, and during the earlier inhalations must very carefully and *studiously adjust* the anæsthetic to the sensations of the patient.

13. A careful, attentive student, with tact, and not hard and unfeeling, can easily and in a short time be taught to give ether properly.

Since the adoption of Clover's inhaler, I have had singular freedom from anxiety about my anæsthetics—far greater freedom than in the previous period, when I had to depend upon chloroform.

Finally, I would say that this favorable opinion of ether is based upon my experience of its use by a series of very able administrators—some in the Leeds Infirmary, others while acting as my private clinical assistants. Speaking as a looker-on, rather than as an administrator, I should say that the chief points in the right administration of ether are: first, to overcome the nervous dread of the patient by applying the mouthpiece only; then to turn on the ether gently, until the glottis become tolerant and the patient is slightly unconscious; lastly, to complete the anæsthesia rapidly. In advising beginners, I compare the regulation of the quantity of ether to the "curve of harmonic progression."

Addison's Disease.

In the *Boston Medical and Surgical Journal*, Dr. Hall Curtis reports the following case: The patient, aged 54, previously in good health, first began to complain about May 1st, 1881, of exhaustion after rising in the morning, and of difficulty in dressing himself, requiring frequent rests. For some little time before his appetite had been failing. From May 1st to July 1st he lost flesh rapidly. He became somewhat restless and nervous at night. The only prominent symptoms were loss of flesh and strength, and a peculiar color; once or twice looked very yellow. Urine was examined and found free from albumen; color normal; specific gravity 1.015; sediment slight; reaction acid; in fact, there was nothing abnormal about it. In July he went to the seashore, visiting the city but seldom. Took milk freely and all the most nourishing food. Appetite improved slightly, as did his color. On July 2d a consultation was held, and a most critical

examination made, without detecting any disease, although the possibility of Addison's disease was suggested by the discoloration of the face. The blood was examined microscopically, and found to vary but slightly from the normal standard. He was placed on the use of *vinum cibi et ferri cum cinchona*, and Fowler's solution; the latter, proving too irritating, was omitted. Massage was resorted to, and its influence was marked in improving the capillary circulation and restoring the perspiratory function of the skin, and, also, in reawakening the muscles, nerves, and spinal cord to their normal function. It was noted, on August 21, that during the past thirty-six hours he had been troubled with frequent dejections, thin and yellowish, no blood or mucus, and without much pain. The hands and feet were quite cold. The face was quite dark, almost a copper color, with many purpuric spots and points. On the forehead were large, irregular patches of color of a deeper brown. The eyes were sunken, conjunctivæ slightly congested, and with a tinge of yellow; under the eyes the pigment was nearly black. The deep color of face extended half way down the neck, gradually fading in depth of shade. The hands were quite dark, with spots and flecks of a deep chocolate color, ceasing abruptly just above wrists; the inside of the elbows showed a deposit of pigment, which was also very marked on the outer aspect of the joint.

Treatment consisted in a hot rectal douche three times a day, followed by starch and laudanum enema (fifteen drops to half an ounce), Hoffman's anodyne, one drachm three times a day, hot fomentations to abdomen, hot bottle to feet, claret, glass of milk, with two teaspoons of lime-water every two hours.

He now grew rapidly worse, and it is reported, on August 28, that yesterday he passed a quiet day, taking nourishment freely, requiring no sedative; now decidedly weaker; pulse 128; respiration 32 to 36; intellect duller; voice very faint; one dejection since yesterday A.M.; mouth half open; tip of tongue dry and glazed; passed urine freely this morning; temperature in axilla last evening 98.3° F. 7 P.M. Has been quiet, without complaint; delirium constant but quiet; temperature 99.3° F.; hands and arms abnormally warm; legs cold; pulse 130; respiration 40; eyes closed; pupils respond to light; does not reply to questions; has passed urine twice; unable to drink, or unwilling; fed with a spoon.

The night of the 28th was tranquil. Refusing food, he died, without a struggle, at 9.40 A.M., on the 29th.

Autopsy.—*Left supra-renal body* was not disorganized; altered in shape from the well-known cocked hat to an irregular, lobulated appearance, the largest lobule the size of a Lima bean. On section, yellowish gray, homogeneous surface, with caseation, here and there softening; the size of organ but slightly increased.

Right supra-renal body presented the same appearance, only more marked; the largest lobule, at top of gland, size of end of thumb.

The other organs were comparatively normal.

Narcotism in Infancy.

Dr. H. Crippa Lawrence says, in the *Practitioner*: Given a healthy child to start with certain results will follow the administration of narcotics, with an equally certain regularity.

1. In the early administration of a narcotic, more or less diversified, according to the temperament of the infant, a modified degree of excitement will supervene, to be followed by sleep; and this favorable condition of things may recur for a period varying from a few days to a week or two. If, however, the repetition of the narcotic be at all frequent, or if it be exhibited in any but a very small amount, this period of favorable narcosis will be proportionately diminished, and the chances of its lethal effect increased.

2. In some infants the effects of the narcotic will be to speedily constipate, for, as in the adult so in the infant, a narcotic lessens at once the secretions and movements of the stomach and intestines, and consequently digestion becomes arrested.

There is, however, a class of cases met with in infancy, wherein infants, the subject of imperfect digestion associated with colic, become for a time benefited by a moderate amount of narcotic. Here the sedative acts by checking peristalsis, and so enables the food to remain a longer time in contact with the digestive juices, and thus to become more perfectly digested. This condition, however, is more frequent in early childhood than in infancy.

A last and more frequent sign of the administration of a narcotic in the infant is the occurrence, sometimes the concurrence, of diarrhoea and vomiting. When these occur a longer time will elapse than when such conditions are absent, before profound narcosis ensues.

3. In addition to the above, diaphoresis and diuresis may occur, one or both. Either of these may and often will be present in an inverse proportion to the other. The predominance of either will be dependent upon the amount of fluid ingesta, the character of the fluids taken, and the condition of the temperature of the weather present at the time. Obviously, warm weather or an over-heated atmosphere will promote diaphoresis, while cold weather would augment diuresis.

4. The intestinal evacuations soon alter in character, becoming paler and more solid in consistency, diminished in their frequency, and increasingly more and more deficient in bile, accompanied by a change in color, from yellowish-green to verdant green, with or without mucus, and if very constipated, accompanied by streaks of blood, owing to the tenesmus which is associated with the expulsion of the hardened, ill-digested feces.

5. Another vital symptom, though of later occurrence than the preceding, is marked depression of the vital powers, evidenced by sinking of the anterior fontanelle. This is accompanied by other signs of want of vitality, viz., feebleness of pulse, loss of weight, an earthy complexion, wasting, especially marked in the pinched and anxious expression of the face. By this time the infant alternates between efforts at peevish whimpering and imperfect somnolency.

The pupils will be found, in the earlier stages of narcotism in infancy, to be frequently contracted, but when the stage of fontanelle depression is reached they may contract or dilate, and one pupil may be larger than the other. This condition I believe to be dependent upon variations in the amount of fluid present in the ventricles of the brain.

So soon as this stage is reached, any subsequent dose of a narcotic may prove speedily lethal, and the greatest care and caution become necessary to avert an untoward result. It is at this point that I believe the cumulative effect and action of the narcotic assumes a point of much peril to the infant. One of two results may now supervene: either clonic convulsions may set in, though these are not very frequent, or, and much more commonly, profound and perhaps fatal coma.

Malignant Pustule.

Before the Royal Medical and Chirurgical Society (*Medical Times and Gazette*), Dr. J. N. C. Davies-Colley read notes of two cases of malignant pustule, with a table of seventeen cases which had been treated at Guy's Hospital; together with a report of the microscopical examination of sections from the skin of the cheek affected with charbon, by Dr. F. Charlewood Turner. In this paper Dr. Davies-Colley has tabulated seventeen cases of malignant pustule or charbon which have occurred during the last nine years at Guy's Hospital, and he has given more fully the details of two which were admitted into his wards last year.

CASE 1.—F. B., aged 31, worked in a hide warehouse, and had been engaged for eight days with Australian fleeces. On April 10, 1881, a small red spot appeared on his right lower eyelid. It grew rapidly. On the 16th he was admitted, with the eye closed, and with a partly dry, partly vesicular, eschar covering nearly the whole of the swollen lower eyelid. He was in little pain, but weak, trembling and feverish. The glands were swollen. Immediate relief followed the excision of the eschar. In a few weeks the wound had healed, but the eyelid remained everted. Bacilli were found in the blood at the time of the operation.

CASE 2.—T. W., aged 39, a tanner, had been handling foreign hides until July 2, 1881. He then left off work, and on July 6th noticed a red itching swelling on the cheek. It grew rapidly. On the 10th loss of appetite; and on the 11th he was admitted with a raised, nearly circular patch, of more than one inch in diameter, in the middle of his cheek. The centre of this patch was slightly depressed, dry and nearly black. The sides were covered with small, closely packed vesicles. There was swelling of the cervical glands and oedema of the neck. The eschar was excised, and chloride of zinc applied. He recovered rapidly. A colored drawing of the charbon, and drawings of the microscopical sections of the eschar, showing the bacilli anthracis in the corium and around the hair follicles, were shown.

The author wished to call attention to the following facts: 1. Malignant pustule or charbon is not infrequent among tanners and wharf la-

borers who have to handle foreign hides and fleeces. 2. It has not yet been observed at Guy's Hospital as a primary disease in the viscera, or in the form of malignant oedema of the integument. 3. It has been seen only on exposed parts of the body—e. g., the face, the neck and arms—the most dangerous position being the neck, probably from its vicinity to the larynx. 4. The seventeen cases were between the ages of eleven and forty-seven, and the majority were young adults of the male sex. 5. Twelve out of seventeen cases occurred in September and the four following months. 6. The disease may be confounded with malignant facial carbuncle, poisoned wounds, and primary chancres of the face. The chief points to notice are the painless character of the eschar, its vesicular margin, and slightly depressed, dry, blackish centre. 7. The nature of the disease is not unfrequently overlooked, and its symptoms have been attributed to such causes as the bite of a mosquito, or the absorption of arsenic through an abrasion. 8. It should be treated at once by excision or free cauterization. Out of fifteen cases in which the eschar was excised, eight were already suffering from constitutional symptoms, and twelve had considerable oedema or glandular enlargement, yet all recovered. The two cases in which excision was not performed were admitted with dyspnoea and other serious symptoms, and it is probable that in them the operation would not have averted the fatal result. 1. Swelling up of the most superficial part of the cutis, with the formation of a ring of papules surrounding a zone of vesicles, at the centre of which is an eschar, is the earliest change recognizable. 2. That bacilli are present in their papules, but not beyond them, being 3. Numerous in the tissue of the cutis immediately below the eschar, and above to its borders, and most abundant just below the Malpighian layer of the epidermis covering the outer part of the eschar.

The President said he thought the case of the gentleman referred to had come under his notice, and he did not consider it a case of charbon. The gentleman had been at the Oxford and Cambridge boat-race on a very hot day, and was bitten under the chin by a fly. He died very soon, of acute septicæmia. The bite had been either poisonous from the first or had been poisoned by scratching from matter under the nails.

Mr. Bryant was sure the disease was not sufficiently recognized, and he ventured to suggest that the very case mentioned by the President was an instance in point. The central, black eschar and indurated and reddened base could hardly be mistaken, and early recognition was of the utmost importance, as immediate operation was necessary, even in doubtful cases, especially where the charbon was situated on loose connective tissue. In his own case, though soon operated on, the oedema spread to the glottis and killed the patient.

A Two-Headed Monstrosity.

Dr. Milner Moore records the following rare and interesting case in the *Lancet* :—

On March 25th I was sent for to see Mrs. A. B., aged thirty-one, who had had labor pains for

more than ten hours, increasing gradually in severity and frequency. She had borne two full-sized children previously, by natural means, the last being two and a half years old. Liqueur amnii had escaped at 7 A.M., March 24th, but no pains occurred until midnight, when they set in with regularity. When I saw her at 10 A.M., March 25th the os uteri was only partially dilated, very high up, and the occiput presented anteriorly; pains occurred with severity every five minutes. I watched the case anxiously until 5 P.M., when but little progress in the passage of the head had occurred, but the os uteri was more dilated, pains were strong and frequent, but ineffectual, and all the signs of weariness were coming on. I applied the forceps with some difficulty, owing to the partial dilatation, administered chloroform, and proceeded to use traction, which after some minutes brought the head well down on the perineum and partially through the vaginal outlet. I could not succeed in delivering the head, and at the cessation of traction it receded completely. Examining then once more, and passing my fingers beyond the head, I found what I considered to be the vertex of a twin which seemed to prevent the passage of the body belonging to the first head. At this juncture I sent for my partner, Dr. Dewes, who speedily came. I put the patient completely under chloroform. Dr. Dewes reapplied the forceps, and succeeded in delivering the head, but it receded as soon as released from the blades. Dr. Dewes agreeing with me, after another examination, which revealed an ear high up beyond the promontory of the sacrum, that we had to deal with a monstrosity, decapitation was decided upon, and carried out with some difficulty. As soon as this was done, I could feel a shoulder above the pubis, and a neck and head above the promontory; then, with the concurrence of Dr. Dewes, I passed my hand, seized a foot, and turning the child, delivered with comparative ease.

The monster proved to be a large female child, with two heads and necks, one trunk, and two upper and lower extremities. The circumference of its chest at axilla, was 15½ inches, length 19½ inches, and weight 8½ lbs. The right head presented with occiput anteriorly, and in the second position. On dissection, the following were the positions of the viscera: The sternum was to the left of the body, but the complex heart, which lay behind it, was directly in the centre. The heart consisted of one auricle, from which projected, vertically downward, two distinct cone-shaped pairs of ventricles, those on the left lying one in front of the other, while those on the right lay side by side. From the anterior, thicker ventricle on the left side there proceeded a large vessel which first gave off the pulmonary artery, and then formed a communication with another vessel, which arose from the posterior thinner ventricle, and gave off two branches to the upper limb, and head and neck; by the joining of these vessels, a large trunk was formed, which met a similar artery from the right side, and formed the descending aorta. On the right side a large vessel originated from the thick outer ventricle, gave two branches to the upper extremity and neck, and a communicating branch

to the smaller artery, proceeding from the inner thin ventricle, which then went to the lungs; the vessel formed by this junction met its counterpart of the left side two inches from its origin. There was a complete set of lungs on each side of the thorax—that is, two lungs with three lobes in each. The other organs were as in a single child. The spinal column consisted of two spines, having origin from one sacrum, blended together as far as the third dorsal vertebra, where they separated, and rudimentary ribs appeared to be starting from the inner side of the right spine.

The patient made a good recovery.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Two cases of hemi-schrmatopsia are carefully reported by Dr. Henry D. Noyes, in a reprint from the *Archives of Ophthalmology*.

—Biology is studied with much zeal in the Johns Hopkins University. Those who would like to see the course laid out for the coming year should write for the *University Circular* in this department.

—The Proceedings of the Alumnae Association of the Woman's Medical College of Pennsylvania form a pamphlet of 42 pages. The numerous letters read from absent alumnae represent most of them as well satisfied and in successful practice. Perhaps the dissatisfied did not care to write. Several original articles are added, some of which are reprinted from periodicals. It is evident that females as physicians are acceptable to the community, and have now a firm foothold.

—The contents of *Lippincott's Magazine* for August are light and summery throughout, suggestive of mountain rambles and seaside excursions. "St. Jerome's Day with the Pueblo Indians" is a well illustrated paper descriptive of a half-religious, half-barbaric festival in New Mexico. An "Adirondack Home," by P. Deming, has the well known characteristics of the writer's Atlantic sketches, close observation, quiet humor, and sympathetic treatment of the primitive freshness and quaint features of life in the wilderness. "The Romance of Childhood," by Henry A. Beers, is a charming paper, tinged with a delicate fancy, by turns tender and playful. Mrs. M. G. Van Renasselaer's concluding paper on the Alleghanies gives a deeply interesting sketch of the career of Gallitzin, the prince missionary, who did so much for the early civilization of the mountain regions of Pennsylvania, and, in contrast to this, a description of the Cam-

bria Iron Works, which form the most striking features of the actual life of that district. "Bay Beauties and Bay Breezes," by P. V. Huyssoon, is very amusing, and the other articles are all attractive.

BOOK NOTICES.

How We Ought to Live; a Practical Guide for the Preservation of Health and the Attainment of Longevity. By Joseph F. Edwards, A.M., M.D., etc. Philada.: H. C. Watts Co., 1882. 8 vo, pp. 636.

As time progresses it grows more and more evident that the noblest, the most useful arena for the physician's labor is in the *prevention* of disease. Hence the enormous impetus which of late years has been given to hygiene.

We welcome the volume whose title is given above as a valuable auxiliary in the crusade against those powers which, to use an expression of Matthew Arnold's, make for disease, unhappiness, and the deterioration of the race.

The author has a love for his subject; he has thoroughly mastered its details; he presents them as they are understood by the masters of science; his style is remarkably lucid and attractive, and his work, therefore, one that cannot fail to produce widespread and excellent results. There is in it no hobby-riding, and it is marked by a happy avoidance of that technical language which is so repelling to the general reader. The book may be characterized as a series of agreeably written short essays on almost every topic which touches upon hygiene.

In a general way the sequence of these essays follows that of the life of the individual. The earlier ones are on the care of infants, the care of children at home, and of children at school. To these follow others addressed to adults, on such subjects as the hygiene of building, ventilation, work, eating, exercise, bathing, sleep, dress, and so forth. The objections to the use of tobacco and alcoholic beverages are stated fairly and fully. Special chapters are added for the guidance of persons liable to consumption and heart disease, and the hygienic rules particularly applicable to pregnancy, nursing and advanced age are accurately set forth. The Appendix contains a number of letters from men of very advanced years, giving their history, so far as it throws light upon the rules of attaining old age. These are very interesting, and cannot fail to command the attention of all who take up the book.

In all respects the volume is one which we can heartily commend to the public, and which merits extensive popularity. Were it introduced into every family and read diligently, the misery and mortality of the land would both be greatly diminished.

Syphilis. By V. Cornil, Professor in the Faculty of Medicine of Paris. Translated, with Notes and Additions, by J. Henry C. Simes, M.D., and J. Wm. White, M.D. Philadelphia: Henry C. Lea's Son & Co. 1882. pp. 461.

The main questions regarding syphilis are treated of as mostly settled in this work. The author considers the dualism of the chancres as completely established, and proceeds upon this theory. Some of his statements excite surprise, as when (page 33) he says the ordinary period between exposure and the appearance of the infecting chancre is "twenty-five days, frequently six weeks or two months," which seems also to have staggered his translators, for on a later page (98) they say "very rarely six to eight weeks." On such an important point, such contradiction does not impress one favorably.

It is conceded that in "a few" cases true indurated chancre is *not* followed by syphilis, even if left without treatment; and it is also conceded (page 99) that simple venereal ulcer is sometimes followed by the systemic disease. If this is so, the duality is far from established.

The local treatment of true chancre is not considered of much importance. Excision may be of benefit, but caustics are disapproved. The translators believe that excision, in certain cases, prevents the development of the disease.

These practical points have taken our attention from the chief merit of the book. This is as a treatise on the pathological histology of syphilis. It is with the special purpose of showing the evolution of the disease as indicated by histological changes that the author prepared his volume. In this respect it is much superior to any other we could name, and merits the close reading of syphilologists. A syphilitic ulcer appears to be a new cell growth, and to offer peculiarities which separate it from other forms of tissue destruction. These are amply shown by both description and illustration.

The translation is very well done, and the reader will not regret the considerable additions which the translators have inserted in the text, drawing from their own experience and reading. They do not always agree with Prof. Cornil, nor should we ask them to. The volume is a welcome contribution to syphilology.

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A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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LEGISLATION FOR THE PREVENTION OF SYPHILIS.

The more carefully the insidious and deteriorating effects of syphilis are studied, the clearer does it become that the welfare of humanity demands that steps should be taken to prevent its extension. The prejudices of bigots must be disregarded, and the fear of unpopularity must be set aside by the profession in this matter, if its members intend to do their plain duty.

The earnest efforts of a few enlightened men are at last beginning to bear fruit. At the Eighth Annual Meeting of the American Public Health Association, in December, 1880, at New Orleans, the following resolution was offered by Dr. McCormack, of Kentucky, and adopted by the Association:—

Resolved, That for the purpose of securing uniformity in legislation in the States of this Union, for the prevention of venereal disease, the Committee on Prevention of Venereal Disease be reconstituted and instructed to prepare drafts of a State law and of a municipal ordinance calculated to secure the desired results, and report at the next annual meeting of the Association.

In compliance with this, Dr. John Morris, of

Baltimore, submitted the draft of an act to the Association, at its meeting in Savannah, last December, which was referred to the committee, with instructions to make a final report at the Tenth Annual Meeting, which will take place in Indianapolis next October.

We give below the outline of the act, and the committee will be pleased to receive any suggestions as to amendments in its form. They should be sent to Dr. Morris at as early a date as practicable:—

An Act, entitled "An Act to prevent the spread of Contagious Diseases."

ARTICLE I. *Be it enacted by the* [Senate and House of Representatives of the State of.....],

That any person within the jurisdiction of the State [or Territory], who shall knowingly communicate, or be instrumental in communicating, directly or indirectly, any contagious disease, such as smallpox, scarlet fever or venereal disease, shall be guilty of a misdemeanor, and subject upon conviction in any court having cognizance of misdemeanor [where the offence may have been committed] [in the State or Territory], to the punishment of six months' imprisonment in the [County Jail].

ART. II. That if any person being the owner, agent or occupant of any house, room or place within the jurisdiction of this State [or Territory], shall have reasonable cause to believe any person located permanently or temporarily therein to be affected with a contagious disease; and shall fail to make such fact known to the proper health authorities [or if there be no such officials, to the nearest magistrate having jurisdiction of misdemeanor], he or she shall be deemed guilty of a misdemeanor, and upon conviction in any court having jurisdiction of misdemeanors [where the offender may reside or the offence have been committed], shall be liable to a penalty not exceeding [five hundred] dollars or to imprisonment not exceeding six months, or to both.

ART. III. That the State Board of Health, with the approval of the Governor, and the Health Board of the City of.....with the approval of the Mayor of said City, shall have power to institute and carry out all suitable measures to prevent the spread of diseases of a contagious character, and may, if deemed advisable, remove to proper hospitals selected by them all persons suffering from contagious diseases, who, neglecting proper precautions, imperil the health of the community.

ART. IV. That this Act shall go into effect from and after the.....day ofA. D.....

It will be seen that all police regulations, medical inspections and special rules for controlling houses of ill-fame are left for local legislation. This is as it should be, for no one system would suit all cases.

Nor does the act definitively lay down the misdemeanor it contemplates so specifically but that considerable latitude is left to its interpretation. It must remain for the courts to decide what constitutes "reasonable cause." It is plain that no brothel-keeper will denounce an inmate of her own house. The "reasonable cause of belief" must be the statement of a physician occupying an official position, and without this the act will in those cases be of no avail.

If any further evidence were wanted to show the imperative necessity of such an act, it is presented in a paper read before the New York Medico-Legal Society last April, by Dr. Albert L. Gihon, Medical Director U. S. Navy, on "The Prevention of Venereal Diseases by Legislation." A copy of this can be obtained from the author, 1736 I street, Washington, and it should be read by all whose minds are not clear as to the propriety of such legislative action. It presents, in telling language, the ravages of the disease and the cause there is for its prevention whenever this can possibly be effected.

CHLOROFORM INHALATION.

Notwithstanding the many fatal accidents caused by chloroform narcosis, and notwithstanding the many substitutes—ether at their head—recommended and employed, like chloroform, to produce complete insensibility, there are so many points in favor of the latter drug that we cannot be surprised at the many researches which have been instituted, either to detect the real cause of death by this substance, and the circumstances tending to favor and those which possibly may prevent a fatal result, or to find means by which the danger may be lessened, or at least the prognosis be based upon more definite knowledge.

There is no remedy which is so little disagreeable to animated beings and which so rapidly induces complete anesthesia, as chloroform. We now know that the latter becomes especially dangerous in cases of organic lesions of the heart and of the lungs, and that its inhalation is very apt to be fatal in cases of advanced diffused

kidney affections. But then cases have occasionally been met with where it seemed impossible to give any scientific reason for the sudden death, where anemia of the brain could alone be said to have caused the fatal result. Careful investigations have of late more and more substantiated the fact that such accidents may be avoided, if the chloroform has been recently prepared, not been exposed to the light, and if a small quantity of alcohol (spec. grav. 0.834) be added to the chloroform. Dr. THEO. CLEMENS, who in 1850* made this question the subject of a thorough investigation, had again, some months ago,† the opportunity to carefully search for the cause of the intoxicating effects of inhalation of chloroform. The latter had been pronounced pure by a chemist, but CLEMENS found the same "self-decomposition" of the drug he had frequently noticed under similar circumstances. HAGER,‡ one of the most reliable of modern chemists, says that chloroform of the spec. grav. of 1.495–1.496 carries in itself all the conditions for a self-decomposition which may act very dangerously on the system. He says, in the work quoted, page 864, "Chloroform in the act of self-decomposition must be considered a very dangerous anæsthetic, and this the more, as the decomposition at the time of evaporation of the chloroform becomes far more active, and the physician should prefer, therefore, the so-called chloral-chloroform. But with a chloroform of a spec. grav. of 1.488–1.492 no such danger is to be apprehended."

CLEMENS has clearly proven, however, that by the addition of a little *spiritus vini*, chloroform, even after having been kept for years, will undergo no such self-decomposition. Chloroform containing five per cent. of alcohol will also not be altered by light. CLEMENS directed the treatment by chloroform inhalations of forty-eight cases of grave pneumonia, losing only two cases and employing the drug in the form indicated. Chloroform to which alcohol has been added does not lose any of its narcotic influence, becomes, when

* Deutsche Clinic, Dec. 21st, 1850.

† Medizin Central Zeitung, LX, 1.

‡ Handbuch der pharmaceut. Praxis, etc., Berlin, 1876.

inhaled, more agreeable to the taste, and can be taken by persons unable to inhale pure chloroform.

The importance of this fact will be appreciated if we remember that a number of cases of grave pneumonia with severe orthopnea have recently been reported by German authorities as cured by the inhalation of chloroform with alcohol, and that the latter method (inhalation of alcohol) has been found to be of greatest benefit in asthenic forms of febrile disorders.

ASCITES IN CHILDREN.

Ascites in children is a rare disease. If it happens, it is generally produced either by tubercular peritonitis or by cancer of some of the abdominal organs. Dr. Seiler, in Dresden, contends (*Berl. Klin. Wochenschr.*, xviii, 26, p. 365) that whenever the causes just mentioned cannot be detected in ascites of children, a diffused syphilitic hepatitis or circumscribed gummata will *always* be found to have given rise to the abdominal dropsy. He thinks that the cases so far reported belong to the category of retarded hereditary syphilis, and that this form of ascites always yields to mercury or iodine, or to a combination of both. At the same time he admits that occasionally this ascites may be caused by a curable, simple hypertrophic cirrhosis of the liver. For better explanation, SEILER gives the history of four cases:—

1. A girl, aged 13, after having frequently complained of not feeling well, without the appearance of any specific signs or symptoms, was taken sick, February of last year, with swelling of the abdomen, which on examination was found to be distended with a rather large quantity of free fluid. June 11th, about five quarts of a serous, light yellow fluid, containing a considerable percentage of albumen, was withdrawn, by paracentesis, from the abdominal cavity, after which operation the liver could be felt as a soft tumor extending down below as far as the middle of the abdomen. Mercurial inunctions into the abdominal walls, and internal administration of iodide of potash, caused a diminution in the size

of the liver, and the ascites did not reappear. Cure within six weeks.

2. A four-year-old girl, with really enormous ascites; otherwise perfectly healthy. By paracentesis, four quarts of turbid serum was withdrawn, when it was found that the liver reached as far as the crista ilei. Seven weeks later tapping had again to be resorted to, but this time the quantity of the fluid was less. The same treatment as in the first case was continued for two months, when a tonic treatment was instituted. When, eight months after its admission, the child was discharged from the hospital, the ascites had disappeared, but the liver was still a little lower down than the middle of the abdomen. SEILER saw the girl again when she was thirteen years old, and on percussion, found the size of the liver to be normal. The ascites had never returned.

The third and fourth cases concern a seven and a fifteen-year-old girl, and contain nothing of special interest, their history being similar to the first two cases.

That there may be still other causes producing ascites in children there can be no doubt; the writer of this saw one in which, in consequence of intense inflammation of the portal vein (due to a cold?) and occlusion of the same near its entrance into the liver, the most intense ascites developed itself in a boy nine years old. The case ended fatally. KORMANN has also reported another case (*Jahrb. f. Khkde*, xvi, p. 170, 1880) in which the etiology did not coincide with that given by SEILER.

NOTES AND COMMENTS.

Rupture of the Uterus.

A great deal has been written about the etiology of rupture of the uterus, and the following case, which we find reported in *Schmidt's Jahrbücher* (1882 No. 1) is especially interesting, as no plausible cause could be detected. A laborer's wife, aged thirty-five, and mother of seven children, had again become enceinte. The first eight months the case progressed favorably. At the beginning of the ninth month she became slightly feverish, and continued so for several days, when

she experienced labor pains and went to bed. Soon afterward she was seized with a most violent pain in the abdomen, which was followed by a slight hemorrhage from the vagina. The woman then fainted. A physician was called and he applied a tampon of cotton wadding.

In the afternoon of the same day the patient was seen by Dr. M. Hofmeier, of Berlin. He found her in a state of collapse, throwing herself restlessly about in the bed and crying out with pain. To all appearances the case was one of septic peritonitis. The patient was chloroformed, and parts of the fetus now became visible through the thin abdominal walls. Dr. Hofmeier opened the bag of waters and extracted the child easily, by the feet, after turning. There was no difficulty in removing the placenta by traction on the cord. Further examination revealed the fact that the uterus was ruptured on its right side, from the fundus down to near the external os, so that the head penetrated, without obstacle, into the abdominal cavity. The latter was filled with fluid and coagulated blood. The patient was brought into the hospital and laparotomy performed. The wound was closed by twenty sutures. On the second day after the operation the patient died. The pelvis was normal, and the contractions of the uterus had evidently been of a mild character only. The rupture was 14 centimeters in length. The fetus was in the beginning of the ninth month.

It may be supposed that the rupture took place at the moment the patient experienced the sudden pain; the fetus had occluded the os, and so the hemorrhage took place into the abdominal cavity. The walls of the uterus were thick and appeared in a perfectly healthy condition. Of fatty degeneration, which was observed in Simpson's case, not a trace could be found. None of all the causes which Bandl mentions as producing rupture of the uterus were present in this case.

Administration of Tannic Acid.

The influence of tannic acid on albuminuria cannot be denied. Even if we should not be able to prevent the progress of the disease to its fatal end, by reducing the quantity of albumen in the urine, or by totally removing it, we stop, at least, a drain of the system, and may thus be able to prolong life by causing a cessation in the waste of albuminoid compounds. Of late, Dr. H. Ribbert, in Bonn, has made some very important researches (*Cbl. f. d. Med. Wissensch.*, 3, 1882) in this direction. He contends that we can undoubtedly reduce the amount of albumen excreted,

and that our efforts will be crowned the more with success, the earlier in the disease the regular internal administration of tannic acid is commenced. He recommends large doses of the sodium tannicum.

In connection with this, Dr. Lewin (*Deutsche Med. Wochensch.*, 6, 1881, has made some experiments to prevent the disagreeable effect of preparations of tannic acid on the mucous membrane of the alimentary canal. For this purpose he recommends the following prescriptions:—

I. SODIUM TANNICUM.

R. Solut. acidi tannici, gr. xvi-xxc: f3 v
Adde.,

Solut. sodii bicarb. q.s. ad react. alkaline.

Sig.—To be kept in a well-corked glass, and used within one or two days.

II. TANNICUM ALBUMINATUM.

R. Solut. acidi tannici, 3 ss: f3 iij
Adde, agitando,

Solut. albumin. ovi unius., f3 iij.

Sig.—The greater the quantity of the tannic acid, the greater must be, in proportion, the amount of the white of the egg.

III. TANNIC. ALBUMINAT. ALKAL.

R. Acid. tannic., 3 ss-gr. lxxv
Aque destillat., f3 iij

Adde agitando,

Albumin. ovi unius,

Sodii bicarb. solut. q.s. ad solut. limpida.

Sig.—Best adapted for a longer course of tannic acid.

Sugar in any form should be avoided in these preparations.

Tumor of the Brain with Decided Eye Symptoms.

Dr. James A. Spalding had for a number of years a very interesting case of tumor of the brain under observation, and we find the case reported in *Schmidt's Jahrb.*, 1882, No. 1, pp. 50, 51.

An otherwise apparently healthy man, set. 20, was attacked by the following symptoms in the order mentioned: left-sided paralysis of the abducens, continuing for ten days and apparently caused by exposure to cold while sleighing. Six months later complete paralysis of all muscles provided by the motor oculi of the right side set in. No improvement, but instead, after two more months, intense headache made its appearance, and continued daily for several hours. A year and a half after the initial symptoms vision was suddenly extinguished on the left side. At the same time paresis of accommodation and swelling of the optic nerve, with atrophy, developed themselves. About six months later the patient had an attack of severe vertigo, followed immediately by paralysis of the left arm, to which

gradually total left-sided hemiplegia was added, as well as facial palsy of the same side. The periodical pains in the head ceased entirely. The right eye also then became blind, while hearing was impaired. Death did not take place till five years after beginning of the first symptoms.

Post-mortem.—In the left anterior fossa was found a dense tumor consisting of two lobes, and reaching from the processus clinoides anterior to the foramen magnum and sideways to the os petrosum. A second tumor of the size of a walnut was detected under the anterior lower surface of the left hemisphere of the cerebrum. The microscopical appearance of the tumors is not mentioned. Optic nerve, chiasm and olfactory nerves were found to be atrophied.

Styptic in Phthisical Hemorrhages.

Jaccoud (*Hémoptysie apyretique chez les tuberculeux. Mon. de la Polyclinique*, 3, 1882) recommends the following in cases of hemorrhages in tubercular phthisis:—

R. Ergotin, gr. xvj
Glycerin,
Aque destillat, aa f3j
Aque laurocerasi, f3ss. M.

A hypodermic syringe is filled with this solution, and, according to the severity of the case, from two to four such injections are made daily.

Clinical Thermometers.

The Second Annual Report of the Astronomer at Yale College states that the improvement in the manufacture of clinical thermometers in this country continues, and the thermometers he receives which are most misleading in their indications are those which come in from private practice, and which have been in use for a year or more.

These errors sometimes amount to 2° , which would render a clinical thermometer much more than worthless. He adds:—

"We have been much encouraged in this department of the observatory work by the cordial endorsement given to it by the medical press. There have been some suggestions made by gentlemen eminent in the medical profession, both privately and in print, concerning some new facts we should give in the certificates accompanying thermometers sent from here. The most important is contained in Dr. E. R. Squibb's interesting paper on clinical thermometers, read at the New York State Medical Association's meeting at Albany and refers to the testing of thermometers for sensitiveness. He

notes the difference in time required for different thermometers to attain their maximum reading, owing to the varying thickness and shape of the glass in the bulb, and suggests some test be applied which shall give the observer the time required for each instrument to reach its maximum. We have considered this matter, but so far have not devised a simple test which sufficiently approximates the conditions met with in medical practice to be of service in this connection."

Introduction of Aliments and Medicines Through the Nasal Cavity.

Fernet and Martel (*Schmidt's Jahrb.* 1882, No. 1, p. 63) have made a number of experiments to demonstrate the possibility of introducing aliments and medicines through the nostrils.

For this purpose the patient is placed on his back, in the recumbent position, while the head and the upper part of the throat are permitted to fall somewhat backward. The gum hose of a common nursing bottle is then pushed into the posterior part of one nostril, and the fluid—either containing nutritive substances or medicine—slowly poured in. In consequence of the peculiar position of the body, the floor of the nasal cavity and the velum form an oblique plane, so that the fluid mentioned flows directly into the pharynx and induces swallowing. Generally, and especially if the fluid is poured in slowly, the expected result ensues with certainty, and in a manner by no means disagreeable to the patient; only when the fluid is poured in too rapidly, a few drops may find their way into the larynx, causing the well known irritating cough.

Fernet and Martel have employed this method successfully in persons in a comatose condition, in children suffering from tubercular meningitis, and even in newborn infants too weak to take the breast or the bottle. This method may also be successful to introduce such medicines into the stomach which, in consequence of their bitter or nauseous taste, are rejected by the patient.

Créquy recommends, for this purpose, the introduction of a flexible gum tube (catheter). If this is pushed behind the velum, the possible reflow of the fluid, by the other nostril would effectually be prevented.

Martel reports two cases: one, where, in consequence of a fall on the head, severe concussion of the brain, with trismus and utter inability to swallow, set in, and the other, a case of pneumonia in a drunkard, the patient being totally unconscious. Here the medicines—calomel and

jalap in the first, musk and digitalis, in the second case—were successfully carried into the system by the method described, and though in consequence of their severity the cases ended fatally, the procedure itself achieved its object.

Vaginal Hemorrhage in a Newborn Child.

Dr. Josef Pollak, in Deveser, reports an interesting case in the *Wien. Med. Presse*, xxi, 27 p. 876. He observed in a female infant, four days old, a not inconsiderable hemorrhage from the vagina. The bleeding reappeared several times daily; after the third day the discharge assumed a reddish-brown, and later a chocolate color, and ceased totally when the infant was nine days old. At the same time there was noticed a swelling of the mammae, and on pressure a milk-like fluid oozed from them, drop by drop. The latter symptom is rather common, while hemorrhage from the vagina in infants is exceedingly rare, but seems to possess much less significance than intestinal hemorrhage. The general health of the case just reported did not apparently suffer at all in consequence of the bleeding.

Ligature of the Innominate Artery.

It is reported, in the *Medical Times and Gazette*, that Mr. William Thomson tied the innominate artery of a man aged fifty years, the subject of subclavian aneurism. Mr. Barwell's ligature was used to secure the vessel. Up to the present time the patient is making satisfactory progress. The patient suffered from an aneurism springing from the third and second stages of the subclavian artery. Some months ago he refused to submit to any operation, and left the hospital. He, however, lately returned, the aneurism having increased in size, and then measuring three and a half inches in diameter at its base. Operation was again proposed, and was consented to; but pulsation ceased suddenly. This continued for twelve hours. During a week there were occasionally short cessations, but the tumor meanwhile enlarged, the skin became red, and it was determined to operate. The wound has entirely healed, with the exception of the opening left by the drainage tube; the pulse is 98, and temperature is normal; the tumor is smaller, absolutely still, and sensation is returning in the right arm, which had long been paralyzed by the pressure of the aneurism on the brachial plexus. Much interest is naturally felt in the result of this operation, seeing that of fifteen recorded cases only one recovered, the

patient being a negro, operated upon by Smith, of New Orleans. In that instance there was severe secondary hemorrhage, and it became necessary to ligature the vertebral and internal mammary arteries.

SPECIAL REPORTS.

NO. VIII.—VENEREAL DISEASES.

SYPHILIS VS. CANCER.

The differential diagnosis between syphilis and cancer is oftentimes attended with much difficulty. In the *British Medical Journal* Dr. Thomas Drapes relates a case that well demonstrates the embarrassment with which the surgeon will be sometimes surrounded when endeavoring to differentiate between these two morbid conditions. The patient was a respectable married woman, aged 50. She began suffering from her throat, the first symptoms being pricking pains running through both sides of the throat. She experienced steadily increasing pain and difficulty in swallowing, so that only liquids could be consumed, and they would have to be held in the mouth and allowed to descend into the stomach drop by drop. She lost flesh and strength and was confined to bed. On entering the room one was immediately struck by the extraordinary fetor emanating from the patient, which possessed that peculiar pungent, stinking quality, so characteristic of cancer in its later stages. The back of the pharynx was thickly covered with purulent secretion. On examination with the finger a rugged, irregular mass was felt, occupying the back and right side of the pharynx; the surface was knobbed, hard and bossy. The age of the patient, the circumstances and the peculiar fetor indicated cancer, and a gloomy prognosis was made. Palliative treatment with iron was adopted, without benefit. Subsequently it was accidentally discovered that the patient had been treated two years before for a rash over her entire body, which went away after using medicine that she said "rotted her teeth." It also transpired that her husband had been treated for syphilis about a year before. Mercurial inunction was prescribed, and in a few days, along with it, three grain doses of iodide of potassium thrice daily. Immediate improvement commenced; in a week she could eat meat. The fetor and discharge rapidly and permanently disappeared; the gummatous infiltration steadily diminished, and perfect cure resulted.

SYPHILITIC PACHYMENINGITIS OF CEREBELLAR FOSSA.

Before the Medical Society of London (*Lancet*)

Dr. Broadbent related the post-mortem appearances in a case of paralysis of the right seventh, eighth and ninth nerves. There was a syphilitic history; after pain in the right occipital region, paralysis came on successively in the seventh, eighth and ninth nerves of this side. There was deafness, as well as facial paralysis; paralysis of the sterno-mastoid and trapezius muscles, with atrophy so complete, that these muscles had practically disappeared. There was also paralysis of the vocal cord. Paralysis and atrophy of the right half of the tongue came on while the patient was under observation. It turned out to be a case of syphilitic pachymeningitis of the right cerebellar fossa. When the tentorium was divided the right lobe of the cerebellum was found to be closely adherent to the dura mater, and the thickened membrane to have strangled the nerves at their exit by the foramina. This was the sole lesion, the medulla and fons being quite normal, as were all parts of the brain. Dr. Hughlings Jackson said that in most of these cases there is a history of syphilitic disease, although not in all; in one case where there was but little doubt of syphilitic disease during life, after death a cyst in the cerebellum was discovered, while in another case was found a glioma, involving the medulla and pons.

CRANIAL OSTEOPHYTES.

Before the same society, Dr. Radcliffe Crocker presented a case of congenital syphilitic osseous thickenings and enlarged spleen, in a male infant eleven months old. The patient was a seven months' child. The skin is sallow and waxy looking, but he is well nourished. There are symmetrical osseous thickenings on each frontal bone, about an inch and a half in diameter, commencing about an inch above the orbits, which are separated by a sulcus of the breadth of the finger. The anterior boundaries of the fontanelles are thick, but the posterior thinner than normal. There is no cranio-tabes. The spleen is much enlarged, extending two inches and a half below the ribs and measuring three inches across. Dr. Sansom pointed out that in the rachitic skull the margins of the fontanelles were shelving, and not thickened nodular prominences, as in syphilis.

SYPHILITIC PARALYSIS.

In the *Lancet*, Dr. Tuckwell reports the following peculiar and instructive case: The patient, a woman aged 30, was married and had had two children. The last pregnancy was twelve months prior to admission. No distinct history of syphilis could be obtained, but there were very strong reasons for suspecting that she had been exposed to the infection. She had

never been ill before in her life, except with slight sore throat some fifteen years before. Upon rising in the morning of the day on which her illness began she felt perfectly well, but during the day had aching pains in her ankles and legs, and she noticed that her legs gave way when she tried to walk, so that she was unable to go up stairs at night. For the first week her hands and arms were unaffected, but after that time they gradually lost power, without any numbness or unusual sensations in them. She was well nourished; there was no muscular atrophy. Below the knees there was complete anæsthesia, both to tactile and painful sensations. It also extended above the knees, but was less marked on the outer side of the thighs. Over the region of the buttock she could feel quite well, the area of normal sensation joining that of anæsthesia, about the level of the great trochanter. The fingers of both hands were anæsthetic. The feeling in the palms was diminished. She could feel and localize fairly well on the backs of the arms. The patellar tendon-reflex was abolished, and there was no ankle clonus. The pupils were not dilated and reacted well to light. There was no reaction in the legs to faradization. The patient slept well, appetite good, temperature normal. The heart, lungs and other portions of the body were healthy. The urine was free from albumen, and she had perfect control over the sphincters. The loss of sensation gradually progressed. Three weeks after admission she had a convulsive attack which began with twitching of the right hand and right side of the face, and which passed off, leaving the legs rigid. This rigidity disappeared the next day.

Ophthalmoscopic examination showed well marked optic neuritis in the left eye, clouding of the retina around the disc and swelling of the disc itself. The arteries could scarcely be seen; the veins were large. Right eye: the outer half of the disc was obscure, the inner half dull; veins large, arteries indistinct. She was treated with large doses of iodide of potassium and galvanism, and it is recorded that after eight months her condition has improved much in every particular, and the improvement is continuing.

SYPHILITIC DEFORMITY OF THE TEETH.

Before the Odontological Society of Great Britain (*Medical Times and Gazette*) Mr. Ackery showed two cases of unilateral syphilitic deformity of the upper central incisors; in each case the left central showed the typical notch while the right was normal, which possessed some interest

as an unusual occurrence, since nearly all syphilitic manifestations are bilateral. Mr. Coleman presented a model of a case in which there were two supernumerary centrals of distinctly syphilitic type, while the proper centrals, which were coming down within the arch, were well formed. The patient presented other evidences of syphilitic taint. Before a meeting of the same Society (*British Medical Journal*) Dr. B. W. Richardson read a paper on "*The Causes of Dental Caries, Constitutional and Local.*" For some years he has kept a record of the condition of the teeth of all patients that came before him. He found that, of over four thousand persons, of both sexes and all ages, over eighty per cent. were affected more or less severely with dental caries; while it was rare to meet with a person in whom both sets of teeth were altogether free from the disease. The two general causes which he believes to be chiefly responsible for this condition of affairs are hereditary syphilis and dyspepsia. With regard to the first, he quoted the statements of Professor Gross and Dr. Holland, respecting the proportion of the adult population of the United States and Great Britain, respectively, who acquire the primary disease, estimated in each case at about one in eight. Contracted in adult life syphilis does not materially affect the teeth; but the hereditary constitution bequeathed by it is undoubtedly indicated in the next generation by disease of the teeth, and by a constitutional condition in which caries is readily developed. It is hard to say whether dyspepsia should be placed before or after syphilis in point of importance.

ASSOCIATION OF TABES DORSALIS WITH SYPHILIS.

In the course of an interesting article on this subject, by Dr. Thomas Buzzard, in the *Lancet*, he says that when writing upon syphilitic affections of the nervous system, in 1871, he included progressive locomotor ataxy among the nervous affections belonging to the tertiary stage of syphilis; but since that time circumstances have so altered his views as to make him now entertain some doubt as to the relationship of cause and effect in these two diseases. His reasons for becoming skeptical he gives as follows:—

"Erb, in a recent publication, says that out of forty-four cases he had met with a history of syphilis in twenty-seven. Out of fifty-three cases of my own, a probable history of syphilis is noted in twenty-five, but I have reason to think that this figure may not accurately represent the actual proportion, my notes of several of the cases being imperfect. Now, if we add together the statistics of Fournier, Erb, and myself, we shall find that in seventy-six cases out of one hundred and

twenty-seven, or in 59.8 per cent., there was a history of syphilis.

"It is clear that coincidence is not sufficient of itself to establish anything like a necessary relation. It might turn out, for example, that a relation of the following kind existed: *Tabes dorsalis* was formerly supposed to be due to sexual excesses; the individual addicted to sexual excess would be, *ceteris paribus*, more exposed than another to the chance of syphilitic infection, and the misfortune attributed to the latter might really be due to the former. I do not support this view; on the contrary, I do not think there is any ground for believing that sexual excess is, at all events, a frequent antecedent of *tabes*, but I mention it as an illustration of one mode in which there might be a coincidence in the occurrence of syphilis and *tabes* without any real association of cause and effect. There may be others.

"It is necessary also to bear in mind another very possible source of fallacy. There is often great difficulty in ascertaining the date of the earliest symptoms of *tabes*. There may have been some slight flying pains which have left little or no mark in the recollection of the patient, and in nine cases out of ten have been set down by him to rheumatism. Yet these pains, usually the earliest evidences of *tabes*, may have occurred before he became infected with syphilis. In the case of a gentleman whom I have at present under occasional observation there were neuralgic pains in the head some years before he acquired syphilis. Who knows whether these did not depend upon sclerosis of the deep root of the fifth nerve, as is probably the case in the patients whom I showed at a recent lecture? On this account I do not think my statistics are to be depended on, as showing with any certainty the proportion of cases in which syphilis was acquired before the earliest symptoms of ataxy, and it is evident that the same objection may possibly apply to the figures collected by others. The discovery made by Westphal, that absence of patellar tendon-reflex is a very early symptom of *tabes*, will help us greatly in the future in regard to this subject, but it necessarily throws no light upon the date of origin of those cases the notes of which were taken before his all-important observation became common knowledge.

"The position of *tabes* in regard to syphilis is peculiar in another respect. Affections of the nervous system which owe their origin to syphilis are not, as such, distinguishable in any very evident manner from diseases unconnected with such infection. The hemiplegia which results from thrombosis of a cerebral artery affected with syphilitic disease follows the same course as hemiplegia consequent on thrombosis of a cerebral artery thickened by atheroma. Syphilitic new formations in connective tissue bring about symptoms depending on lesion of nervous structure, such as might be referable to growths of any other kind. But there are two points especially which frequently afford strong presumptive evidence as to the syphilitic nature of a certain affection. In the case of lesions referable to thrombosis of a cerebral artery there is the age of the patient. Should this be much below that at which degenerative changes may be reason-

ably looked for in the arterial system, there being at the same time no evidence of changes in the heart or kidneys, I think we may almost certainly refer the arterial thickening to syphilis. So also in regard to growths. As a matter of experience, it is certain that almost all cases of marked paralysis of single cranial nerves (I exclude here the incomplete and transitory paralysis seen in tabes) are due to syphilis. When along with this are conjoined symptoms which can only be referred to in the existence of another distinct lesion (one causing—*e. g.*, hemiplegia, monoplegia, or paraplegia), the evidence is greatly strengthened. It becomes, indeed, so strong, and the chance of exception due to the presence of tubercle or cancer is practically so small, that, in the absence of the strongest corroborative evidence of the latter diseases, we should be culpable in treating the case otherwise than as one of syphilis.

"But in tabes the circumstances are very different. Take, for example, the question of age. If we compare the ages of tabetic patients in whom inquiry elicits a history of syphilis with those in which this element is wanting, we are not struck by any marked constancy. When we meet with the case of a young man of twenty or thirty years of age who has hemiplegia apparently resulting from cerebral thrombosis, and in whom there is no history of rheumatic fever, heart or kidney disease, we know at once that his disease is almost certainly the result of syphilis. We are struck by the fact that he is suffering from an affection brought about by disease of his cerebral arteries. The more ordinary cause of such disease is the atheromatous thickening which comes in association with other degenerative changes brought about by agedness. Syphilis induces changes in the arterial coats, which lead to a precisely similar result. The indications are simple enough. But in tabes we are left without aid from this question of age. The disease is one commonly of adult life, which most often commences, so far as we can judge, in the period between maturity and middle age, and whether there is a history of syphilis or not, the large majority of patients are about this time of life.

"There remains the question of sex, consideration of which may help us a little. My personal experience is that only 10 out of 100 patients suffering from tabes belong to the female sex. Gowers thus refers to the point: 'Whatever it is which determines the occurrence of locomotor ataxy in men and very rarely in women, and which must be regarded as one of the causes of ataxy, operates in conjunction with syphilis in confining the syphilitic ataxy also to men. Other consequences of syphilis occur in women as well as in men; ataxy in men almost exclusively.' Some years ago, in view of a coming discussion on syphilis at the Pathological Society, I tabulated 100 cases of disease of the nervous system dependent, so far as could be determined, upon syphilis. From this list all cases of tabes were excluded. Sixteen out of the 100 patients were females, but I have since had reason to think that the proportion of females affected with disease of the nervous system consequent upon syphilis is far greater than this. Again, the oc-

currence of tabes in females of good social standing is surely of extraordinary rarity. Are females of this class equally exempt from syphilitic affections of the nervous system of a kind which is generally recognized? I am sure that they are not, and that in this respect there is a very striking contrast.

"If tabes be very frequently of syphilitic origin, how is it that females, who bear their fair share of other diseases of the nervous system of specific origin, furnish only ten per cent. to the ranks of the former disease?

"While it appears to me incontestable that there is a remarkable frequency of association between syphilis and tabes dorsalis, I do not think, all things being considered, that the time has yet arrived for us to draw safe inferences as to the precise nature of the relation."

TREATMENT OF SYPHILIS.

Dr. G. H. Fox read, at the New York Materia Medica Society, a paper on the treatment of syphilis, in which he lays down the following propositions:—

1. Mercury is the most valuable curative agent of which we have any knowledge. The positive results which follow its employment are such as to convince any competent observer as to its efficacy.
2. It is, however, an overrated remedy; for, while it will lessen the manifestations and shorten the natural course of syphilis in most cases, it will not always produce a speedy and beneficial effect, as generally believed.
3. Patients would derive great benefit if more value were attached than at present to hygienic measures, instead of relying solely on the specific action of mercury.
4. Remedial agents often acquire a fictitious value by reason of the fact that patients improve during their administration. We know that mercury is not inert, and have ample proof that it can accomplish a great deal. The improvement which takes place in patients is not wholly the effect of the mercury, but is in great measure due to the *vis medicatrix*.
5. Mercury is not essential to the cure of syphilis. The disease has a tendency to run its course, and in the majority of cases is far less malignant than it is supposed to be. If the patient is of sound constitution and the infection is mild, it usually runs its course without injury to the health. "It may be said that such patients will suffer more from severe lesions in later years. I believe that these patients are as thoroughly cured as those who have taken mercury."
6. The internal administration of mercury is preferable to its use in the form of inunction, vapor-baths, etc., in all cases of constitutional disease.
7. The dose of mercury usually given is too large. "In my own experience I have never seen any benefits result from the combination of various salts of mercury, as recommended by Bumstead, or by the frequent change from one preparation to another."
8. The duration of mercurial treatment should vary according to the character of the case. There are cases of mild and cases of severe syphilis. Mild syphilis does not require mercurial treatment. "There are cases which demand two, three, or perhaps five years of treatment. But it is utterly impossible

to fix a certain time as the duration of treatment in all cases. . . . My own practice is to give mercury in every case during the existence of any symptom of the disease, whether it occurs early or late. In the early period I continue it for six months after the last symptom has yielded; I then stop it, and await further developments. If the symptoms reappear, I revert again to mercury, and continue perhaps for two or three months after the disappearance of the latest symptom. In late syphilis I give mercury to subdue any growing symptom, and then stop."

Of iodide of potassium, Dr. Fox has a high opinion.

"I believe that in the early stages of syphilis it is an invaluable therapeutic agent. In the stage of efflorescence, I must admit that the drug has little or no effect upon the cutaneous manifestations. In ulceration of the tongue and mucous patches, I have seen good results following its use, when mercury had been given for several weeks, with no effect. In the cure of cephalalgia and arthritic pains, associated with the first outbreak of syphilis, it displays its remarkable power. Of its great value in late syphilis, I need not speak. Its power is often exerted in a most brilliant manner when its administration is preceded by a course of mercurials. The iodide is best prescribed in an aqueous solution, a cubic centimeter containing one grain. It is a remedy which no patient ought to be compelled to take for a great length of time. It does its work quickly or not at all, and when unnecessarily continued, is sure to do harm. For every case of syphilis that I have seen benefited by immense doses of the iodide, I have seen at least two in which large doses have done harm. I do not deny the value of large doses in certain cases, but I protest against the continuance of large doses in chronic syphilis. When there is dyscrasia and a weakened state of the digestive organs, I have great faith in the iodide of starch."

"Iron in the treatment of syphilis is of very great value. It deserves to be ranked with mercury and the iodide. Its power to combat the anemia which is invariably present in the early stage of syphilis renders it a most invaluable adjunct of mercury. I should prescribe it for a patient presenting chancre or initial lesion, and give it as a routine in the secondary lesions. It tends in a slight degree to lessen the probability of subsequent manifestations. In the weakened state of the system, associated with late syphilis, the value of iron is too well known to require mention; but in the early stage of the disease its value seems to be unknown or unappreciated. I employ the tincture of the chloride in daily doses of ten to fifteen drops. Cod-liver oil is a remedy which is not unfrequently of service. When an individual with a strumous diathesis is affected by this disease, its symptoms are apt to be severe and prolonged, and amenability to mercury is greatly lessened. In these cases the use of cod-liver oil alone, or in connection with iron, is likely to be productive of good results. In late syphilis of an ulcerative type I have repeatedly seen mercury fail to do good at first, while after the administration of the oil for a

month or two it has accomplished all the good that could be expected from its use."

In the discussion which followed, Dr. Sturgis observed that although many cases of syphilis will get on very well without mercury, there is a risk for the future incurred by not giving it, for it is impossible to say whether the case will turn out well or ill. He has a much higher opinion of inunction as a means of administering mercury than Dr. Fox; but he believes that the value of iodide of potassium as a curative agent has been much overrated, although it forms an excellent adjuvant. He has found the iodide of starch so unsatisfactory that he has abandoned its use. As regards the combined use of mercury and the iodide, he believes the effects attributed to the iodine are really due to the mercury, the iodine seeming to favor the solution of the mercury and render it more active. Thus, after a course of mercury and iodine, slight pytalism and diarrhoea may be produced, while no such results had followed when mercury had been used alone.

Dr. Johnson agreed with Dr. Sturgis in believing that the iodide renders mercury which had remained inactive in the system for a time much more active. It acts in an analogous manner with regard to lead, in poisoning from which it is not infrequently administered. By prolonged use it helps to eliminate the lead, although the first stage of its action is to increase the activity and poisonous effect of this.

Dr. Castle, in using the iodide, either alone or with mercury, generally in the later stages of the disease, has had the objects in view of inducing the absorption of pathological products, and the relief of the pains which occur at the later stage of the malady; and he does not believe that iodine in any form exerts any other specific effect. As soon as it is eliminated its effect ordinarily ceases, and to secure this it must be continued for some time. He agrees with Dr. Fox regarding the different ways different persons are affected by symptoms, and has met with many very mild cases: but he has treated these also with mercury, with a view rather of preventing subsequent developments than because their condition at the time required active medication. In such cases, as in those that are more severe, he has combined it with the use of tonics, and as thorough an attention to hygiene as practicable, believing this quite as important as any specific treatment.

Dr. Morrow observed that, in the general habit of treating syphilis with mercury and iodine in all its stages, he had also treated many cases without mercury, and had been unable to detect any

difference in the evolution of secondary symptoms in either set of cases. He also pointed out the fact that a much longer course of mercurial treatment (at least four years) is now deemed to be required for protection from subsequent manifestations than was considered necessary some twenty-five or thirty years ago, when a course of six or twelve months was regarded as sufficient. This would seem to show a growing lack of faith in the curative properties of mercury.

CORRESPONDENCE.

Heat Fever.

ED. MED. AND SURG. REPORTER:—

As the hot weather is now upon us, and the evil effects of high temperatures will have to be met and combated by the profession, I have thought the history of the following case of (shall I call it?) heat fever, might be interesting to the readers of your journal:—

August 27th, 1881, D. called upon me at my office, and asked me to go and see his child, a girl, aged three and a half months, in consultation with Dr. X. D. said his child was in convulsions and that he did not think it would live an hour. I went with him at once, and upon my arrival I found the child in convulsions, wrapped in a big shawl, mustard plasters on its back and feet, in a very small room, crowded with distressed and sympathizing neighbors and friends, a big fire in the cook stove in the kitchen and the temperature of the little sufferer 108° F.

Although the windows of the room were hoisted, the air was very hot and oppressive. The thermometer indicating a temperature of 90 to 100° in the shade. I ordered the child to be taken out of the room onto the porch, stripped of all its clothes, the mustard washed off its back and feet, and its body wrapped in a single layer of muslin, wrung out of cold water, to facilitate the rapid cooling of the child. I directed it to be fanned constantly. On the porch Dr. X. tested the temperature of the patient and found that it was 107° by his thermometer. As the porch adjoined the kitchen, where the hot stove was, I directed the child to be taken into the yard, in the shade of the house, and that cloths saturated with alcohol be substituted for the cold water applications, as it tended to more rapidly cool the patient. All this time the child was working in convulsions. The advantage of ordering the baby into the yard was apparent to all, viz: cooler and purer air, and a better opportunity for those sympathizing friends to observe all that was going on, to satisfy their curiosity without in any way adding to the discomfort or peril of the little sufferer. Steadily persevering in the application of the cloths saturated with alcohol, and the fanning, I had the satisfaction of seeing the temperature of the child gradually fall to 96°, and, *pari passu* the subsidence of the convulsions, until, when the temperature had fallen to 96°, the convulsions had altogether ceased. I then discontinued the applications and the fanning. The temperature

soon rose above the normal again, and as it rose the symptoms of the recurrence of the convulsions reappeared. By reapplying the cloths saturated with alcohol, and by fanning, to increase the rapid evaporation of the alcohol, and thereby more rapidly reduce the temperature, the convulsions were controlled, and the heat of the body kept about normal. Attention to the diet and remedying the irregularities of the digestive organs, finally restored the little patient to comparative health, although she is still unable to walk.

H. NYE, M.D.
Enon Valley, Pa.

Death from Morphia without Narcotism.

ED. MED. AND SURG. REPORTER:—

I was called, April 28th, at 8 A.M., to Mr. H., aged 27, married, occupation conductor. I found him vomiting violently, not able to retain the smallest quantity of anything on his stomach. Frequent discharges from the bowels, cold extremities. Pulse 160. Respirations 24. Suppression of urine. Pupils strongly contracted.

As he had, a month previous to this, taken morphia with suicidal intent, and suffered from the same symptoms, I suspected an overdose of morphia again, and upon inquiry found that he had taken twenty grains of morphia the evening before, which did not produce sleep. Nor was there either narcotism or delirium throughout the case. There was no change whatever in any symptom except increased heart action and cyanotic appearance of the extremities. He died 4 P.M. the 30th. It is not necessary to give my treatment in the case; suffice it to say I used neither atropia nor any preparation of belladonna. On account of the peculiar symptoms some of the medical gentlemen who were with me in the case suspected other poison than morphia. Accordingly we removed the stomach May 1st. Three weeks later it was sent away for analysis, which threw very little or no light on the matter, as no poisonous material of any nature could be detected.

I have frequently been called to patients who were suffering from large (but not fatal) doses of morphia, with very little narcotism, but have never met with a case before which resulted in death without narcotism, diminished respirations, and other symptoms generally produced by overdoses of opium and its preparations.

Stanbury, Mo.

W. C. ROSE, M.D.

NEWS AND MISCELLANY.

Darwin's Death.

From a speech which Virchow made last month, in a meeting of the Berlin Anthropological Society, in reference to Darwin's death, we glean the following concerning the last hours of the great naturalist:—

Darwin died from an affection of the heart, from which he had been suffering for years; but which, till a few days before his death, had not been considered as dangerous to life. Until two

weeks before his death Darwin used to leave his house and take a walk, notwithstanding he commenced to feel very weak. He still continued his favorite work, and the day before his death he examined a plant. About half-past eight o'clock in the evening he was carried to his bedchamber, where he sat up some time, reading. Toward midnight he was seized by a severe spasm, which, notwithstanding the most attentive treatment, caused his death at four o'clock in the afternoon.

Milk Sickness.

The mystery which surrounds milk sickness cannot be said to have been removed by the late investigations of Dr. James Law, published by the National Board of Health. He, however, believes that it is characterized by the presence in the blood of a species of spirillum, resembling that seen in relapsing fever. The germ is probably derived from drinking water, or from the surface of vegetables, as certain wells are said to infect with certainty, and the disease has been repeatedly produced by feeding upon particular plants (*Rhus toxicodendron*, etc.) That these plants in themselves are not the pathogenic elements, is shown by their innocuous properties when grown in places out of the region of the milk-sickness infection. Dr. Law thinks it altogether probable that here, as in malignant outbreak, we are dealing with a micro organism which has developed pathogenic properties, and which can be produced indefinitely in the bodies of living animals.

We should be glad to print further observations on this disease from some of our Western readers.

American Dermatological Association.

The Sixth Annual Meeting of the American Dermatological Association will be held at Newport, R. I., on August 30th, 31st, and September 1st.

Embalming.

The principal Italian embalmers keep their special processes a secret, although the chief steps are well known. The process of embalming is stated to consist of five steps. First, cold water is injected through the whole circulatory system until it issues quite clear; this may take as long as five hours. Alcohol is then injected, for the purpose of abstracting all the water from the body; this is followed up by the injection of ether, to dissolve out the fatty matter; this injection is carried on for several hours—in thin subjects for two, in very fat ones for even so long as ten hours. After this a strong solution of tannin is slowly injected, and full time is allowed for its soaking into all the tissues; this takes from two to five hours. Lastly, the body is exposed, for from two to five hours, to a current of warm air, which is previously dried by passing it over heated chloride of calcium. The body can then be preserved

for any length of time without undergoing change, and is as hard as stone.

Items.

—The *Canada Journal of Medical Science* says:—

"In a curious old work, published in 1824, entitled '*Nugæ Chirurgicæ*,' by Wm. Wadd, Esq., F.L.S., we find the following account of Cordus, a physician of eminence, who died in 1585: 'Cordus, who was accustomed to receive his fees only at the termination of his patient's disease, describes, in a facetious epigram, the practitioner at three different times, in three different characters:—

'Three faces wears the doctor: when first sought,
An angel's; and a god's, the cure half wrought;
But when, that cure complete, he seeks his fee,
The devil looks then less terrible than he.'"

MARRIAGES.

BULLARD-SUEDMEIR.—On Wednesday, June 21st, 1882, at the residence of the bride's parents, by Rev. T. T. Holton, of Lincoln, Ill., Dr. Frank B. Bullard and Miss Kate Suedmeir, both of Chestnut, Ill.

DALSEN-SMITH.—On July 8th, 1882, by the Rev. R. F. Alsop, Charles W. Dalsen, m.d., and Laura V. Smith, both of this city.

DENNIS-LODER.—In this city, on Tuesday morning, June 20th, at the residence of the bride's brother, Dr. Percival E. Loder, by the Rev. Achilles L. Loder, of Gunnison, Colorado, Dr. D. N. Dennis, of Kilmory, Conn., and Miss M. Camilla Loder, of Philadelphia.

PROPER-ANDRE.—June 1st, 1882, at Mr. Wesley Cramer's, near Franklin, Pa., by Rev. T. D. Stewart, Dr. Walter J. Proper, of Wallaceville, Pa., and Miss Clara A. Andre, of Hendersonville, Pa.

RIMER-HESSON.—In West Philadelphia, June 21st, by Rev. J. Addison Henry, d.d., J. Thomas Rimer, m.d., of Clarion county, Pa., and Carrie Adele Hesson, of West Philadelphia.

SIMPSON-PRATT.—On Tuesday, May 23d, by Rev. Andrew Lees, George W. Simpson, m.d., of Mill Creek, Huntingdon county, Pa., and Miss Hattie L. Pratt, daughter of Henry M. Pratt, Esq., Philadelphia, Pa.

SNOW-LOCKWOOD.—July 6th, 1882, at New Canaan, Conn., by the Rev. Joseph Greenleaf, Dr. Gustave N. Snow, of Hartford, Conn., and Josephine H., daughter of John W. Lockwood, of Philadelphia, Pa.

SWIFT-JACOBS.—In New York, on Tuesday, June 15th, at All Souls' Church, by the Rev. Russell N. Bellows, Marie Ahorn, daughter of the late Samuel J. Jacobs, and Dr. William J. Swift.

VREELAND-LOCKWOOD.—At Westtown, N. Y., June 8th, by the Rev. R. Bowen Lockwood, assisted by the Rev. J. B. Fisher, J. S. Vreeland, m.d., of the above-named place, and Miss Kate Lockwood, daughter of the officiating minister.

WEBER-CASSELBERRY.—On Thursday evening, May 25th at the St. James' Perkiomen Church, by Rev. J. L. Haysinger, Dr. Matthias Y. Weber and Miss Ann Rebecca Casselberry, both of Evansburg, Montgomery county, Pa.

WEISMANN-WISNER.—On Saturday, July 1st, 1882, by the Rev. Chas. Frincke, of Port Richmond, S. I., Francis H. Weismann, m.d., and Louise Wisner, of Chicago, Ill. No cards.

DEATHS.

FOSTER.—Dr. Nathaniel Foster, an old and eminent physician of Cincinnati, Ohio, died, July 19th, of paralysis. He was a brother-in-law of the late General W. H. Lytle, and was well known throughout the medical fraternity of the Union.